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Volume 55

Number 4

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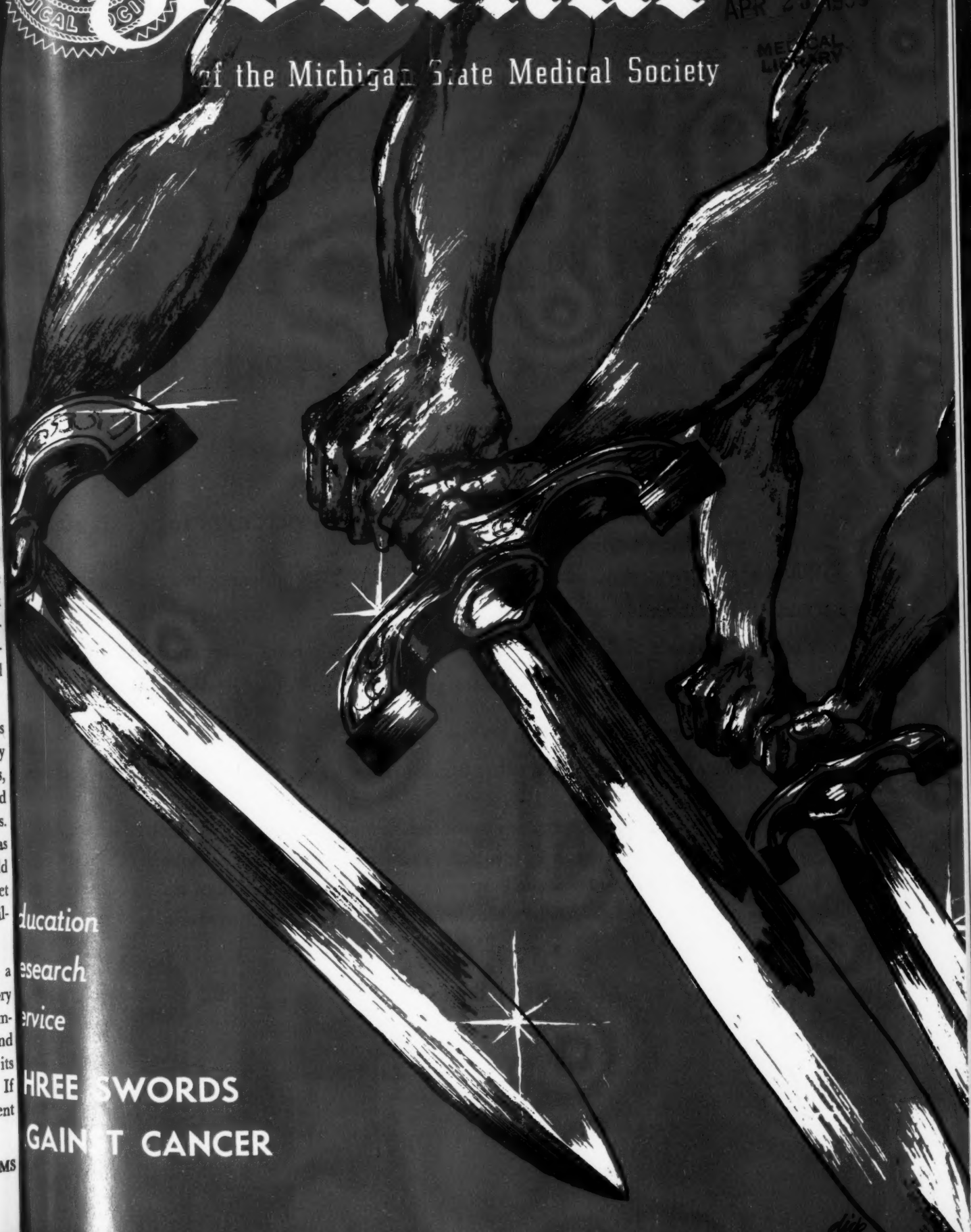
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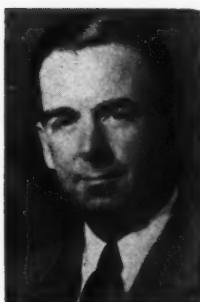
APRIL, 1956

NUMBER 4

Contributors to This Issue



W. H. BEIERWALTES,
M.D.



W. S. CARPENTER, M.D.



J. A. COWAN, M.D.



J. W. HUBLY, M.D.



H. M. NELSON, M.D.



E. T. THIEME, M.D.

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THE JOURNAL

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APRIL, 1956

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1. Howell, T.H., et al.: Practitioner
173:172 (Aug.) 1954.

*T.M. Reg. U.S. Pat. Off. for chlorpro-
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APRIL, 1956

Say you saw it in the Journal of the Michigan State Medical Society

373

You and Your Business

DON'T YOU AGREE? IT'S GREAT TO LIVE IN MICHIGAN

Yes it is! And this is the slogan for the third annual "Michigan Week," May 20-26.

Michigan Week is a "grass roots" program. It extends from the Governor down to the first grader. Its objective is to awaken our people to the past, present and challenging future of our great state for the purpose of building an *ever greater* Michigan.

Its success in sparking local activity is evident in the many meetings, events, celebrations and gatherings is every corner of the state. Local church, school, labor, business, social and cultural organizations co-operate to make it a success.

In all the co-operating groups there is evident a renewed spirit of desire to tell about Michigan products and services, about Michigan places and people, about Michigan's abundance of resources and facilities.

It's a spirit that naturally attracts the attention of those outside Michigan. Anyone likes to see, to take part in, and in a sense to become part of a place that helps make its people prosperous, happy and eager for the challenge of tomorrow.

This spirit affects every doctor of medicine practicing in Michigan. It makes a healthier environment and better facilities with which to practice and a better community in which to live and prosper.

You can play a part.

The fact that you practice in Michigan constitutes a contribution to the prosperity of our state. It is to people like you that the state and community also look for support of forward-looking civic ventures. That is why you are being invited to contribute to the Michigan Week Fund.

Checks may be made payable to Greater Michigan Inc. and sent to Fred Marin, President Bank of Lansing, Lansing, Michigan. Mr. Marin is treasurer of Greater Michigan Inc.

MICHIGAN ASSOCIATION OF BLOOD BANKS

The Michigan Association of Blood Banks has recently been formed, with the purpose of exchanging ideas and disseminating information relating to Blood Banking and its methodology by means of education, publicity and research and to plan for and foster co-operation between the blood banks in the state of Michigan in times of disaster. It will also function as a clearing house on questions relating to training personnel common to such institutions. Through the Blood

Bank Association, it is hoped to keep the various members aware of and encourage high standards of service and to extend similar services through the state where these are needed. The member banks will also be encouraged to co-operate in the North Central Clearing House in a program which is attempting to unite the entire United States through the various District Clearing Houses.

Only through an active state Blood Bank Association, can the above purposes be carried out. Certainly, there has been a need in the state of Michigan for such an organization. In order to function properly, the Association must have the support of the hospital and community blood banks throughout the state of Michigan.

Letters with application blanks will be sent to all hospitals that are members of the Plasma Salvage Program of the Michigan Department of Health. It is hoped that the organization may be started with the co-operation of these blood banks as a nucleus.

The officers of the Association are: Rosser L. Mainwaring, M.D., President; Elmer R. Jennings, M.D., Vice President; and J. A. Kaspar, M.D., Secretary. Any inquiries can be forwarded to the officers at the address of the Secretary: Michigan Association of Blood Banks, c/o J. A. Kaspar, M.D., Secretary, 468 Cadieux Road, Grosse Pointe 3, Michigan.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of February 16, 1956

- **Treasurer's Annual Report** was presented by William A. Hyland, M.D., Grand Rapids, and approved.
- **Meeting with Veterans Administration officials** (Director H. V. Higley and Medical Director W. S. Middleton, M.D.) to discuss continuation of "home town medical care program" was authorized.
- **Rheumatic Fever Co-ordinator Leon DeVel, M.D.** sought advice on expansion of the rheumatic fever program in Michigan. The Executive Committee of The Council felt the present Michigan Rheumatic Fever Control Program of postgraduate education, research, public information and public service should be improved, but that more ways to spend more money should not be sought at this time.
- **Committee Reports**—The following were given consideration: (a) Special Committee on Electronic Equipment for MSMS Executive Office,

(Continued on Page 376)

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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 374)

- meeting of January 28; (b) Fee Schedules Committee (Michigan Medical Service), February 4-5; (c) Permanent Conference Committee, February 8; (d) Committee on Hospital Pharmacies (Michigan Hospital Association), February 15; (e) Mental Health Committee, January 18.
- **President W. S. Jones, M.D.**, reported he already had appeared before five component societies and seven more talks with lantern slide demonstration were scheduled in the near future.
- **Legal Counsel J. Joseph Herbert** was authorized to attend the two-day conference for medical society attorneys sponsored by the American Medical Association in Chicago, April 19-20.
- **E. C. Baumgarten, M.D., W. S. Reveno, M.D.**, of Detroit, and **Ralph W. Shook, M.D.**, Kalamazoo, were nominated for election to two vacancies on the Board of Trustees of Michigan Hospital Service.
- **MSMS is to co-sponsor the Geriatrics Conference**, in co-operation with the University of Michigan Postgraduate Department, to be held July 9-10-11, 1956, in Ann Arbor.
- **Appointment, by President Harlan Hatcher** of the University of Michigan, of **L. Fernald Foster, M.D.**, Bay City, to a Medical Education Survey Committee (of the U. of M.) was approved.
- **A. E. Schiller, M.D.**, Detroit, was appointed as a member of the MSMS Committee on Courses in Medical Economics and Ethics.
- **Legal Counsel J. Joseph Herbert** presented opinions on the following matters: (a) responsibility of physician in giving information to county legal authority where maltreatment of a child is suspected; (b) advantages and disadvantages of incorporation of a county medical society; (c) whether a nurse anesthetist is permitted lawfully to give spinal anesthetics.
- **Public Relations Counsel Brenneman** reported on current legislation before the Michigan Legislature of interest to the medical profession: re arrangements for Awards Dinner of March 7 in Detroit, honoring newspaper editors and radio and television executives cited in September at MSMS Annual Session for outstanding health activities and education of the public.
- **Jenkins-Keogh Bill.**—The Executive Committee adopted a motion "that the MSMS request the American Medical Association to promote the passage of the Jenkins-Keogh Bill by inaugurating a full-scale campaign under competent leadership."

- **Michigan Week.**—Executive Director Burns (a member of the Executive Committee of Michigan Week) reported on the February 15 meeting planning this demonstration of Michigan as a progressive state, the week of May 20-26, 1956.

RESOLUTIONS ADOPTED BY 1955 MSMS HOUSE OF DELEGATES

1. CALIFORNIA CANCER COMMISSION

WHEREAS, the cancer quack does untold damage with his treatment of curable cancer until it is incurable, thereby actively assisting the disease in destroying the patient, and also destroying the faith of the public in recognized methods of treatment, and

WHEREAS, the California Cancer Commission has recognized this and other facts and has maintained a Cancer Commission since 1931, and this Commission has led an active attack on quackery, and

WHEREAS, there is no doubt about the efficacy of this attack as shown by the continued reappointment and broadened activities of this Commission; therefore be it

RESOLVED: That the Genesee County Medical Society recommend to the Michigan State Medical Society that a committee be appointed to investigate the workings of the California Cancer Commission and others now functioning, and to make recommendations concerning the advisability of organizing a Michigan Cancer Commission or to utilize existing committees for the purpose of investigating, evaluating and exposing all so-called cancer cures that are presently known or may appear in the State of Michigan.

2. THE SCREENING OF FOREIGN INTERNS

WHEREAS, this problem concerns hospitals, educational programs, the physicians and the people of Michigan, and

WHEREAS, it has long been an established fact that there are almost double the number of approved internships in this country as there are American graduates to fill the available places, and

WHEREAS, the use of foreign graduates has fulfilled this need as well as encouraged the "Good Neighbor" policy established by the State Department, and

WHEREAS, a list of acceptable foreign medical schools has been prepared by the Council on Medical Education and Hospitals of the American Medical Association and the Executive Council of the Association of American Medical Colleges, and

WHEREAS, in Michigan the State Board of Registration, its then Secretary, has ruled that all foreign graduates must be screened by it prior to appointment to internships, and

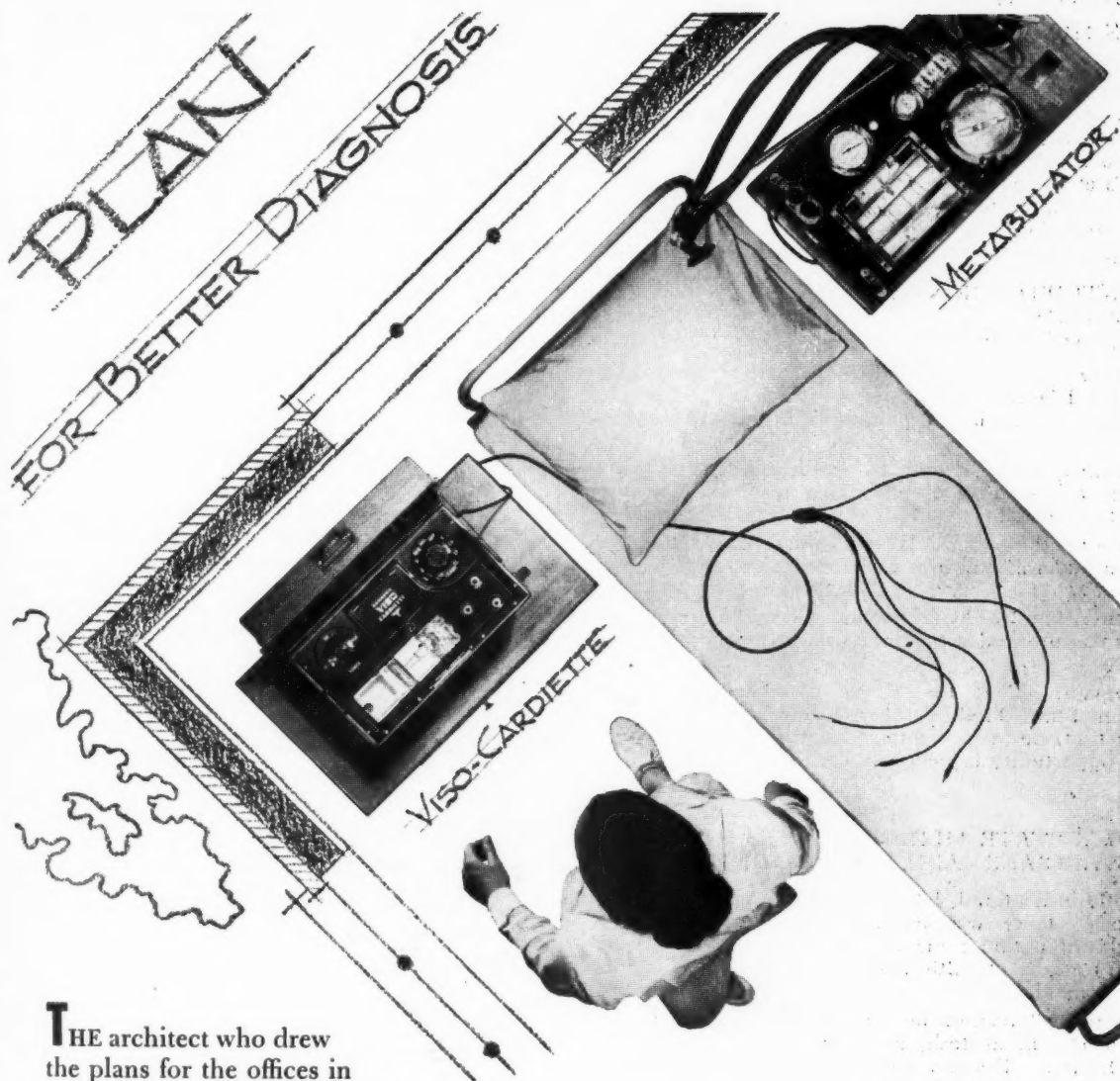
WHEREAS, although the hospitals wish to co-operate with the State Board of Registration in its efforts to maintain a strict supervision of all interns, it is their feeling that the "cease and desist" order and the screening requirements of the State Department of the federal government and the hospitals were sufficient safeguards to prevent the flooding of the State of Michigan with foreign graduates insofar as these graduates must fully comply with the laws and regulations prior to licensure, and

WHEREAS, the responsibility rests squarely on the hospitals and is knowingly assumed by them, and

WHEREAS, these problems were presented to the State Board of Registration and signed by representatives of both the Wayne County Medical Society and the Detroit Area Hospital Council with the approval of the governing bodies of both organizations, and no explanation of action was forthcoming; therefore be it

(Continued on Page 378)

PLAN FOR BETTER DIAGNOSIS



THE architect who drew the plans for the offices in which you are located was not *completely* concerned with how the tenant would make use of the space.

That, of course, was left to *your* planning, and only you know enough of the "anatomy" of your practice to decide which furnishings and instruments are needed.

When electrocardiographs and/or metabolism testers are considered as examining aids, their inclusion in the specifications of a plan to build for better diagnosis is an important decision.

To help you determine the value of these instruments, we will gladly arrange for you to include either or both of them in your "floor plan" during a *no-obligation-to-you* trial period. This will give you an opportunity to judge them from your own point of view before the final "blueprint" is drawn and purchase is made.

When you plan with Sanborn you receive extra benefits that can come only from a direct-to-user policy. The interest in and responsibility towards you as the user is with Sanborn Company instead of an intermediate source.

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on the Viso-Cardiette
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1408 David Broderick Tower, Woodward 3-1283

RESOLUTIONS ADOPTED BY 1955 MSMS HOUSE OF DELEGATES

(Continued from Page 376)

RESOLVED: That the House of Delegates of the Michigan State Medical Society strongly recommend to the State Board of Registration a resumption of the previous methods of handling and admitting foreign graduates, or a modification of the present ruling which will permit a suitable time for these graduates to learn medical English before presenting themselves for examination.

3. CONTRIBUTIONS TO BEAUMONT MEMORIAL (approved as amended)

WHEREAS, the Beaumont Memorial restoration at Mackinac Island is a monument which will stand for generations as a symbol of pioneering in medical progress, and

WHEREAS, every doctor of medicine can be justly proud of this emblem of advancing medical knowledge and of those members who have made it possible, and

WHEREAS, the public relations value of this restoration has been and will continue to be extensive, and

WHEREAS, the individual subsidy by doctors of medicine rather than by Council action will make every member more aware and a part of this worthy project; be it therefore

RESOLVED: That the House of Delegates of the Michigan State Medical Society recommend to The Council that the membership-at-large be given one more year of opportunity in which to contribute.

BRITAIN'S STATE MEDICINE POSES PROBLEMS FOR PHYSICIANS—AND FOR NATION'S HEALTH

Recently in Scotland, I had occasion to go to a doctor, and though there was nothing very wrong with my health, I did obtain some idea of what is wrong with Britain's National Health Service and socialized medicine in general.

Like nearly all doctors in Britain, this one, whom we shall call Dr. MacIntosh, has come into the National Health Service. Doctors engaged full-time in private practice are scarcely to be found beyond the bounds of London's Harley Street, for inflation and taxes have made it difficult for anyone except the very rich to engage the services of an old-fashioned private physician.

Dr. MacIntosh's consulting rooms are in what once was the servants' lodge of a Victorian town-house, where the doctor now lives. The waiting-room—a long, barren place, formerly the servants' hall—was the antithesis of the anteroom of a successful Victorian or Edwardian physician. It was cold and dreary. There was no receptionist; there were no books or periodicals, no pictures on the walls; only some 20 hard little folding chairs. When I came in, the room was full. Most of the men and women were elderly and rather shabby, but none looked particularly sick.

At last my turn came, and after Dr. MacIntosh had examined me, we talked a while. "You seem to have a great many sick people in this town," I said. "Not so very many, really," said Dr. MacIntosh. "A great many old people in this town, especially, yes."

Nothing to Do

"And you're able to treat them very quickly," I remarked. "Treat them?" he replied. "Not one-fifth of those people you saw require any treatment. They're old, and they have nothing to do, so they come to sit in my waiting room, and make me fill out forms for them. After all, this is the next best thing to the cinema."

"If they're hypochondriacs, can't you turn them away?" I asked. "That would not be prudent, in most cases," he explained. "People like that are liable to complain to the National Health Service. And the doctor can be fined, you know, by the Service; and he can be struck off the Service's list. Besides, the fees allowed per patient under the scheme are too low for any doctor to live decently if he turns particular. More than any other group with earned incomes, we doctors are hard-pressed for money in this New Order, you know."

It is all true enough. The days when a good doctor could make his fortune have passed away in Britain. In every country and every age, probably, people have grumbled about doctors making handsome livings out of other people's afflictions. But when this vague resentment is elevated to the condition of a political dogma, and the doctor is reduced by law to the condition of a minor civil servant, with his remuneration fixed accordingly, regardless of his competence—then the question of rewards and incentives comes gravely to the fore.

Lost Status

Most doctors now practicing were trained before the National Health Service came into being, and so must remain in their profession whether they choose or not. But it may not be easy to secure good doctors in the next generation. When the physician and surgeon lose their old status of independence and social dignity, and lose also their once-considerable financial incentive, it may be very difficult to attract to the profession people of real competence and real diligence.

Not all doctors, it's true, are worse-rewarded under the National Health Service. A minimum salary is fixed, so that doctors in out-of-the-way places, where patients are few, may be better off than they were in the old days. The unpopular or less competent doctor, too, may benefit by this leveling process. And the dentist—more by an administrative miscalculation and a backlog of decayed British teeth, perhaps, than by design—is generally better paid than he was before. But by and large the medical profession is now a comparatively depressed calling in Britain.

Nor is the status of the doctor himself the only element to be considered in this problem. The question now is being seriously raised, in sober English journals, whether the general effect of the National Health Service, in the long run, will actually operate to improve the health of the nation.

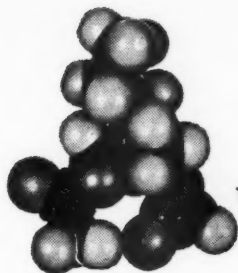
Crowding and Abuse

Whatever is free tends to be held cheap. Free access to the consulting-room may very well lead to such a crowding and abuse of state medical facilities that the people really in need of medical attention are neglected, necessarily, because they are mixed with a crowd of hypochondriacs, bored old people, and people who insist upon their share of attention simply because they are paying for it through taxes. The recent return to charging—at least nominally—for prescriptions issued under Health Service regulations has reduced such abuses somewhat, but the misuse of medical benefits extends far beyond mere prescription collecting.

Dr. MacIntosh and physicians like him certainly do not object to decent medical facilities for everyone. Most of them believe that the more prosperous countries of the Western world now can afford a reasonable measure of medical care for everyone. But there are limits to how much any state can afford to spend simply on health schemes, and the budget of the National Health Service now far exceeds even the most lavish original official estimates of its probable cost.

The question is not one of the desirability of the goal; it is one of means. There are sound reasons for believing that a general improvement of British health

(Continued on Page 380)



THE MILTOWN MOLECULE

Two articles in the April 30th issue of The Journal of the AMA^{1,2} report on ...

**an entirely new type of tranquilizer
with muscle relaxant action—orally effective in**

ANXIETY, TENSION and MENTAL STRESS

- no autonomic side effects—well tolerated
- selectively affects the thalamus
- not related to reserpine or other tranquilizers
- not habit forming, effective within 30 minutes
for a period of 6 hours
- supplied in 400 mg. tablets. Usual dose:
1 or 2 tablets—3 times a day

1. Selling, L. S.: J.A.M.A. 157: 1594, 1955. 2. Borrus, J. C.: J.A.M.A. 157: 1596, 1955.

Miltown[®]

the original meprobamate—2-methyl-2-n-propyl-1,3-propanediol dicarbamate—U. S. Patent 2,724,720

DISCOVERED AND INTRODUCED by Wallace Laboratories, New Brunswick, N. J.
Literature and Samples Available On Request



BRITAIN'S STATE MEDICINE

(Continued from Page 378)

might have been better effected by systems of health insurance, increase of the funds and activities of private and voluntary and co-operative hospitals and medical services, and local—rather than centralized—schemes for improving the health of the poorer people.

Obedience to Ideology

The National Health Service was created out of obedience to socialist ideology, rather than out of any serious examination of the problem and its possible solutions. Indeed, it is a paradox that a vast system of impersonal state charity in medicine has been adopted in Britain precisely at the time when the "poor," in the old sense of that term, have been abolished—at least, the socialists claim they have been abolished.

Many times as much money is spent in Britain on drink, or on football pools, as is spent on private medical attention, and this was true even before the National Health Service was proposed. In the United States, where the public spends a greater proportion of income on medical attention than in any other country, only about 4.5% of family income goes for medical attention. Nearly an equal amount goes for alcoholic beverages; half as much goes for tobacco; and a good deal more goes for recreation. We are living in an age, in short, in which the average man can afford to pay for whatever medical attention he requires, with the exception of the really poor, who are a small minority.

Yet what has been adopted in Britain, and what is sometimes proposed in the United States, is a doctrinaire nineteenth-century solution, socialized medicine, to a problem the terms of which have altered immensely in the twentieth century. In a society of material abundance, state medicine is an obsolete answer.—RUSSELL KIRK in *Wall Street Journal*, February 1, 1956.

LICENSURE EXAMINATIONS

The next licensure examinations of the Michigan State Board of Registration in Medicine will be held on Monday, Tuesday and Wednesday, June 11, 12 and 13, concurrently in Ann Arbor and Detroit at the University of Michigan Medical School and Wayne University College of Medicine. The examination application form and fee in the amount of \$50.00 must be on file in the office of the Secretary of the Board, 118 Stevens T. Mason Building, Lansing, Michigan, no later than May 18, 1956.

In Lansing
HOTEL OLDS
Fireproof
400 ROOMS

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physician groups in Michigan, follows:

1956		
Spring	MSMS Postgraduate Extramural Courses	Statewide
May 3	Twenty-Eighth Annual May Clinic, Ingham County Medical Society	Lansing
May 8-9	Annual Clinic Day and Alumni Reunion, Wayne University College of Medicine	Detroit
May 16	MSMS Executive Committee of The Council	Detroit
June 4-7	American Cancer Society, Sheraton-Cadillac Hotel	Detroit
June 11-15	Annual Session, American Medical Association	Chicago
June 20	MSMS Executive Committee of The Council	Muskegon
June 22-23	Upper Peninsula Medical Society	Sault Ste. Marie
June 28	Keyport Trauma Day	Gaylord
July 9-11	Gerontology Conference	Ann Arbor
July 19-21	Mid-summer Session of the MSMS Council	Mackinac Island
August 22	MSMS Executive Committee of The Council	Detroit
August 30-31	Coller Penberthy Medical Conference	Traverse City
September 10-13	International College of Surgeons, Annual Congress	Chicago
September 24-25	Annual Session of the House of Delegates (MSMS)	Detroit
September 26-28	MSMS Annual Session	Detroit
September 23 & 28	The Council (MSMS)	Detroit
October 11-12	Michigan Cancer Conference	East Lansing
October 17	MSMS Executive Committee of The Council	Battle Creek
Autumn	MSMS Postgraduate Extramural Courses	Statewide
November 14	MSMS Executive Committee of The Council	Detroit
November 27-30	AMA Clinical Session	Seattle
November	Fall Clinic, Michigan Academy of General Practice	Detroit
December 12	MSMS Executive Committee of The Council	Lansing

pronounced

MUSCLE-RELAXING ACTION

Equanil

MEPROBAMATE (2-methyl-2-n-propyl-1,3-propanediol dicarbamate)
LICENSED UNDER U.S. PATENT NO. 2,754,730

For significant relief in myositis, osteoarthritis, backstrain, and related conditions marked by:

- *Muscle spasm*
- *Stiffness and tenderness*
- *Restriction of motion*
- *Pain*

As a superior muscle-relaxant, EQUANIL offers predictable action and full effectiveness on oral administration. It does not disturb autonomic function and is relatively free from gastric and other significant side-effects. Its anti-anxiety property provides important correlative value.

Usual dosage: 1 tablet t.i.d. The dose may be adjusted either up or down, according to the clinical response of the patient.

Supplied: Tablets, 400 mg., bottles of 50.



Philadelphia 1, Pa.

anti-anxiety factor
with muscle-relaxing action
...relieves tension

Unity Spells Progress with Michigan Cancer Co-ordinating Committee

The Michigan Cancer Co-ordinating Committee was formed on November 12, 1953. It is composed of representatives of the following state agencies interested in cancer control:

American Cancer Society, Michigan Division, Inc.

American Cancer Society, Southeastern Michigan Division

Michigan Department of Health

Michigan Health Officers Association

Michigan State Dental Association

Michigan State Medical Society

During its first years, the Michigan Cancer Co-ordinating Committee justified its existence by stimulating cancer education, both professional and public, and by encouraging each of its component members to further endeavor in a co-ordinated non-overlapping program. Its accomplishments in just a brief period are too numerous to list in an article. Its future is bright with a program that encompasses every facet of cancer control in the State of Michigan.

The MCCC is a committee to review and to activate its member organizations to a greater effort in the fight against cancer. While it is not an action committee in itself, it is a stimulator of activity on the part of the formalized groups which compose it. The results in just a brief period of time speak for themselves.

The personnel of the Michigan Cancer Co-ordinating Committee is:

Member-Organization

American Cancer Society
Michigan Division

American Cancer Society
Southeastern Michigan Division
Michigan Department of Health
Michigan Health Officers Association
Michigan State Dental Association
Michigan State Medical Society

Representatives

C. A. Payne, M.D., Chairman, Grand Rapids
L. E. Holly, M.D., Muskegon
Mr. W. F. Doyle, Lansing
Mr. A. S. Albright, Detroit
M. A. Darling, M.D., Detroit
H. M. Nelson, M.D., Detroit
J. A. Cowan, M.D., Lansing
J. D. Heaslip, M.D., Hastings
B. E. Luck, D.D.S., Lansing
R. C. Hildreth, M.D., Kalamazoo
W. A. Hyland, M.D., Grand Rapids
E. T. Thieme, M.D., Ann Arbor
J. M. Wellman, M.D., Lansing

The patient with cancer of the esophagus has a good prospect of cure if the lesion is discovered and removed while it is still confined to the esophagus.

* * *

Unfortunately, only a small proportion of patients with cancer of the esophagus come to the surgeon while the disease is still local.

* * *

Cancer of the esophagus is predominantly a disease of males; the ratio to females is five to one.

Plainwell Sanitarium

PLAINWELL, MICHIGAN

Member American Hospital Association

EDWIN M. WILLIAMSON, M.D.

Psychiatrist-in-Chief

Professional care for the nervous
and mentally ill.

Telephone 2841



Restful Six-acre Estate Overlooking the Kalamazoo River

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as a good
removed

f patients
on while

a disease

River

JMSMS



Re-activate the arthritic

MOST POTENT
ANTI-RHEUMATIC*

Sterane

Even where hydrocortisone, cortisone, and other agents had failed, prednisolone (STERANE) restored articular mobility and functional capacity to normal in rheumatoid arthritis.¹

Four times more effective than hydrocortisone, and, on the basis of preliminary findings,^{2,3} superior in potency even to prednisone (cortisone analog), STERANE is also relatively free of such hormonal side effects as edema, hypertension, or hypopotassemia.

Supplied: White, 5 mg. oral tablets, in bottles of 20 and 100. Pink, 1 mg. oral tablets, in bottles of 100. Both are deep-scored and in the distinctive "easy-to-break" size and Pfizer oval shape.

References: 1. Bunim, J. J., et al.: J.A.M.A. 157:311, 1955. 2. Forsham, P. H., et al.: Paper presented at First Internat. Conf. on Prednisone and Prednisolone, New York, May 31-June 1, 1955. 3. Perlman, P. L., and Tolksdorf, S.: Scientific Exhibit presented at A.M.A. Annual Meet., Atlantic City, June 6-11, 1955.

PFIZER LABORATORIES Division, Chas. Pfizer & Co., Inc. Brooklyn 6, New York

*brand of prednisolone

AMA Washington Letter

THE MONTH IN WASHINGTON

A little-publicized study group of eight physicians and scientists has submitted a report to the Secretary of Health, Education, and Welfare that promises to stimulate considerable debate by all interested in medical research, including members of Congress.

The committee was appointed by the National Science Foundation a year ago at the request of former HEW Secretary Hobby for "a critical review" of the scope and distribution of all phases of medical research where U. S. funds are used. Heading the committee was Dr. C. N. H. Long of the Yale School of Medicine.

Three basic proposals of the committee:

(1) That research within the National Institutes of Health research be levelled off, and policy and personnel matters there be brought under the scrutiny of an advisory board of non-governmental medical scientists.

(2) That other research under the Public Health Service, including teaching grants to institutions and fellowships, be put under a new Office of Medical Research and Training reporting directly to the HEW Secretary and outside the control of PHS.

(3) That emphasis be placed on general research rather than the present trend of specific grants for specific disease studies, the so-called categorical approach.

On receipt of the report, Secretary Folsom promised it would be studied "intensively" both by HEW and PHS officials, but he set no time deadlines.

The Long Committee noted the tremendous growth in federal medical research during and since World War II and the increasing role played by PHS. While conceding that PHS has done its job effectively, the committee felt that the time has come to re-examine the concentration of activities under one agency.

On its first point the committee said NIH is making a major contribution in medical research and that senior appointments there should actually become "the most sought after in the country." It suggested legislation that would permit employment of research scientists at the Institute without regard to commissioning in the PHS Corps or salary limitations imposed by civil service.

On its second basic proposal, the committee recommended that the new agency have authority over (a) unrestricted, long-term institutional grants, (b) grants for research, both categorical

and non-categorical, (c) fellowships and traineeships in medical and related areas, and (d) grants for construction of research and teaching facilities.

Commenting on the categorical approach to research, the committee said the public has been "led to believe, consciously or unconsciously, that the donation of sufficient sums of money is all that is needed to eradicate diseases which have plagued mankind for centuries."

In Congress, any move away from categorical grants in medical research is certain to produce fireworks. Some Senators and Representatives believe it's Congress' responsibility to pinpoint where money it appropriates is to be spent, and they are not inclined to make an exception for research money.

* * *

Two bills on military medical legislation went through the House without change, after detailed hearings and study by a subcommittee. The expectation is that action on them will not be long delayed in the Senate.

One is designed to make military medical careers more attractive by allowing credit for time spent in medical school and internship, and setting up a series of three \$50 per month raises after three, six and 10 years' service. These would be in addition to the present \$100 per month special pay for medical officers. Public Health Service medical officers would benefit, as well as those in Army, Navy and Air Force.

The other bill well on its way to becoming a law allows dependents of servicemen to receive private hospital and medical care, with the government paying the costs of the insurance or health plan coverage and the dependent the first \$25 of the hospital bill. The Secretary of Defense, however, could limit or deny such private care in areas where he determines that military medical facilities are adequate to handle the service families.

Notes

Some of the pharmaceutical houses have told Secretary Folsom that they plan to use more personnel and equipment to step up production of Salk vaccine, but his expectation still is that it will be "many months" before there will be enough vaccine for three shots for "all who need them."

Almost all medical programs handled by U. S. Public Health service are virtually assured of comfortable increases in money for next fiscal year.

(Continued on Page 386)

Upjohn

Ulcer protection that lasts all night:

Pamine^{*}

BROMIDE

Tablets

Each tablet contains:

Methscopolamine bromide 2.5 mg.

Average dosage (ulcer):

One tablet one-half hour before meals, and 1
to 2 tablets at bedtime.

Supplied: Bottles of 100 and 500 tablets

Syrup

Each 5 cc. (approx. 1 tsp.) contains:

Methscopolamine bromide 1.25 mg.

Dosage:

1 to 2 teaspoonfuls three or four times daily.

Supplied: Bottles of 4 fluidounces

Sterile Solution

Each cc. contains:

Methscopolamine bromide 1 mg.

Dosage:

0.25 to 1.0 mg. ($\frac{1}{4}$ to 1 cc.), at intervals of 6 to 8
hours, subcutaneously or intramuscularly.

Supplied: Vials of 1 cc.

*TRADEMARK, REG. U. S. PAT. OFF.—THE UPJOHN BRAND OF METHSCOPOLAMINE

The Upjohn Company, Kalamazoo, Michigan

PR REPORT

IT'S BEEN WIDELY PUBLICIZED already, but the recent AMA public opinion survey made "in order to find out what might be needed to improve doctors' services" brought some very interesting conclusions which might be considered by county medical societies in PR program planning for the future. Following is a very brief summary of the findings, extracted from a recent AMA Secretary's Letter:

"From (the survey) emerged a picture of what people like about and expect from their doctors: sympathy, patience, and understanding, rather than guaranteed cures and 'wonder drugs' . . .

"Major items shown by the survey are: (1) Most Americans have their own family doctor; (2) Most of them like him, and like doctors as a group; (3) People's opinions gained from their own experience differ from those based on hearsay or other sources; (4) Doctors are more critical of themselves than other people are of them; (5) When people criticize physicians, it is largely for the cost of care; they do not, however, think doctors are trying to 'get rich quick'; and (6) They are evenly split for and against 'sliding scales' of fees."

The poll was conducted among a very carefully selected sample of 4,000 persons. County PR Committee chairmen who have not seen the complete compilation may write MSMS for a copy. The supply is limited.

"MAN'S CONQUEST OF DISEASE," a brief but well-done account of the medical discoveries which have lengthened our life span, was one of the most notable local television programs presented recently with County Medical Society cooperation. Well-documented and illustrated, it was presented over WNEM-TV, Bay City, and featured Orlen J. Johnson, M.D., Public Relations Chairman for the Bay County Medical Society, with John J. McKeighan, Sr., of Flint, President of the National Pharmaceutical Association. Another local TV series which has never received all the notice it deserved was presented last fall over WOOD-TV by the Kent County Society, with PR Chairman Fred C. Brace, M.D., in charge. Three very excellent shows were presented, requiring participation by a large group of society members.

MEDICAL EDUCATION WEEK, April 22-28, first such observance ever scheduled, is attracting nationwide attention. In Michigan the event is being helped along by co-operation of MSMS, its Woman's Auxiliary, and several county societies. Among the materials prepared for distribution during the week is a 1955-56 edition of the

very well done AMA brochure, "What's Up With Our Medical Schools?" The booklet is recommended for anyone who wants the facts on American medical schools, their enrollment, entrance requirements and finances. The eight-page publication, available through MSMS, explodes a number of myths relative to medical school admissions.

Another special observance, National Hospital Week, May 6-12, is being boosted in many communities through the individual efforts of MSMS and Auxiliary members. Emphasis this year is on the many ways hospitals serve their areas, built on the theme "Your Hospital—for You and Your Community."

"THE OUTSTANDING CITIZEN OF THE YEAR" is selected in a number of communities either by the local Chamber of Commerce or its junior counterpart. Since the honor is usually conferred for general good citizenship and civic responsibility, it's always gratifying to see an M.D. win such recognition. The most recent recipient to be noted is Mark Osterlin, M.D., who was chosen as Traverse City's outstanding citizen of the year by the Chamber of Commerce. Noting Dr. Osterlin's leadership in a number of community activities over a long period of years, an editorial column in the *Traverse City Record-Eagle* made this observation:

"It is largely Mark's own fault that he was not selected for this honor earlier, for the many things he has accomplished for his community have been done without fanfare and with very little public notice. He's a very poor self-publicist, which makes his selection all the more pleasing."

Such community recognition serves the best interest of the entire medical profession.

AMA WASHINGTON LETTER

(Continued from Page 384)

The House approved recommendations of its Appropriations Committee without change. The only large reduction was \$19 million in money for the Hill-Burton hospital construction program, the committee explaining this action was taken because the "new" HB program (for clinics, chronically ill hospitals, nursing homes, rehabilitation centers) is getting off to a slow start.

A new suggestion for helping to pay for medical care comes from Rep. Charles S. Gubser (R., Calif.). He is proposing that full income tax deductions be allowed for all medical expenses of children under six years of age.

New
Evidence
on

Rauwiloid

**confirms and defines superiority over
other Rauwolfia preparations in the
treatment of HYPERTENSION**

- Rauwiloid represents the balanced, mutually potentiated actions¹ of several Rauwolfia alkaloids, of which reserpine and the equally antihypertensive rescinnamine have been isolated.
- Hence, reserpine is not the total active antihypertensive principle of the rauwolfia plant.
- Rauwiloid is freed of the undesirable alkaloids of the whole rauwolfia root. Recent investigations confirm the desirability of Rauwiloid (because of the balanced action of its contained alkaloids) over single alkaloidal preparations; "...mental depression...was...less frequent with alseroxylon..."²

The dose-response curve of Rauwiloid is flat, and its dosage is uncomplicated and easy to prescribe...merely two 2mg. tablets at bedtime.

1. Cronheim, G., and Toekes, I. M.: Comparison of Sedative Properties of Single Alkaloids of Rauwolfia and Their Mixtures, Meet. Am. Soc. Pharmacol. & Exper. Therap., Iowa City, Iowa, Sept. 5, 1955.

2. Moyer, J. H.; Dennis, E., and Ford, R.: Drug Therapy (Rauwolfia) of Hypertension. II. A Comparative Study of Different Extracts of Rauwolfia When Each Is Used Alone (Orally) for Therapy of Ambulatory Patients with Hypertension, A.M.A. Arch. Int. Med. 96:530 (Oct.) 1955.

Riker

LOS ANGELES

Rauwiloid is the original alseroxylon fraction of India-grown Rauwolfia serpentina, Benth., a Riker research development.

All the

NEW

Multiple Compressed Tablets

'Co-Deltra'

Prednisone Buffered

Multiple Compressed Tablets 'Co-DELTRA' and 'Co-HYDELTRA' are unique among the dosage forms of the newer steroids, because they are specifically designed as a tablet within a tablet to provide stability and to release in sequence, antacid and anti-inflammatory agents . . .

1. the outer layer of antacids (aluminum hydroxide gel and magnesium trisilicate) comes into contact with the gastric mucosa first . . . and after it is completely dissolved . . .
2. the hitherto intact inner core containing the anti-inflammatory agent (either prednisone or prednisolone) then begins to release its full therapeutic potential . . . and not before.

the benefits of prednisone and prednisolone plus positive antacid action to minimize gastric distress...

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1. Bollet, A. J., Black, R., and Bunim, J. J.: *J.A.M.A.* 158: 459, June 11, 1955.

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Editorial Opinion

MAYBE IT'S NOT TOO BAD

The editors of the *New York State Journal of Medicine* point out that the amount of attention given to health problems and to Medicine's attempts to solve them has increased enormously during the past three decades, and they suggest that physicians are mistaken in supposing most of that attention to be unfriendly.

Mr. Dan Mich, editorial director of *Look*, recently released the results of a survey which his research department had compiled. On four medical subjects—cancer, tuberculosis, heart disease and poliomyelitis—no more than thirty articles appeared during the year 1923, and nineteen of those were on tuberculosis. None of the magazines that published them had what could be described as "mass circulation." During 1953, just thirty years later, there were 299 articles on the same four subjects, all of them in popular magazines. The *Saturday Evening Post* regularly prints between twenty and thirty a year; *Good Housekeeping* includes one in each of its issues.

The New York editors are inclined to think it unreasonable for doctors to show distress over finding a few onions among so many lilies. And though they plead, somewhat parenthetically, for facts rather than evaluations from medical science writers, they are in favor of encouraging non-medical publications to devote more, rather than less, space to health topics.—Editorial Comment in the *JOURNAL OF THE IOWA STATE MEDICAL SOCIETY*, November, 1955.

GLAUCOMA IN GENERAL MEDICAL PRACTICE

It is not commonly recognized by the general practitioner that he may be an important factor in preventing much unnecessary blindness from glaucoma. The general practitioner is the first recourse of persons in pain, with physical disabilities or discomfort. His patients properly look to him as the responsible adviser in all matters of physical welfare.

Should a patient's illness require the services of a medical specialist, the patient relies on the family doctor to identify the disease and, on his behalf, to arrange for the kind of special treatment which he may require. Within the last few years chronic simple glaucoma, which unfortunately is an insidious disease, has become recognized as a major problem in the prevention of blindness. In the age bracket over forty years, the incidence of glaucoma in the general population is conservatively estimated at 2 per cent. The general prac-

titioner can expect this proportion of glaucomatous cases among his patients in this age group.

Chronic simple glaucoma in its early stages can usually be controlled without serious loss of vision. It is a progressive disease, and the later the discovery, the less likelihood for maintaining useful vision. The bitter thing about the disease is the usual absence of warning signs until the condition has progressed to the point where vision is affected. Usually the only early sign is increase in intra-ocular pressure or tension. This sign, in turn, is often intermittent in character. When intermittent, it is more likely to be present at periods of stress or emotional anxiety. The patient would be unlikely to call upon an ophthalmologist during the early stages of the disease. The general practitioner is, therefore, his main recourse for early diagnosis.

Examination for glaucoma, even in its early stages, is not an unrewarded effort. The certainty that among his patients the general practitioner will find early victims of glaucoma who can in most cases be saved from serious loss of vision or blindness is a fact of major importance.

The same check for ocular tension will warn him concerning the use of atropine, belladonna, and hyoscine which may exacerbate glaucoma when the disease is present. In respect to glaucomatous patients the physician should also assure himself that there are no allergies to drugs which might otherwise appear to be indicated for topical application to the eye.

Glaucoma in certain stages may be mistaken for iritis and conjunctivitis. Because of this confusion, delay in treating glaucoma properly may result in serious loss of vision.

General symptoms of glaucoma, especially nausea and vomiting, may falsely suggest the diagnosis of gastrointestinal pathology, particularly in instances in which the exploratory type of laparotomy appears to be indicated. As these serious symptoms occur only in acute glaucoma, a delay of even thirty-six hours in administering proper treatment may result in irreparable loss of vision.

The foregoing examples of improper diagnosis are readily resolved in most cases, particularly those with general symptoms, by taking ocular tension. This can be done in approximately three minutes.

More than 400 ophthalmologists are currently co-operating with the Ophthalmological Foundation and offering instruction to physicians in detecting ocular tension and other signs and symp-

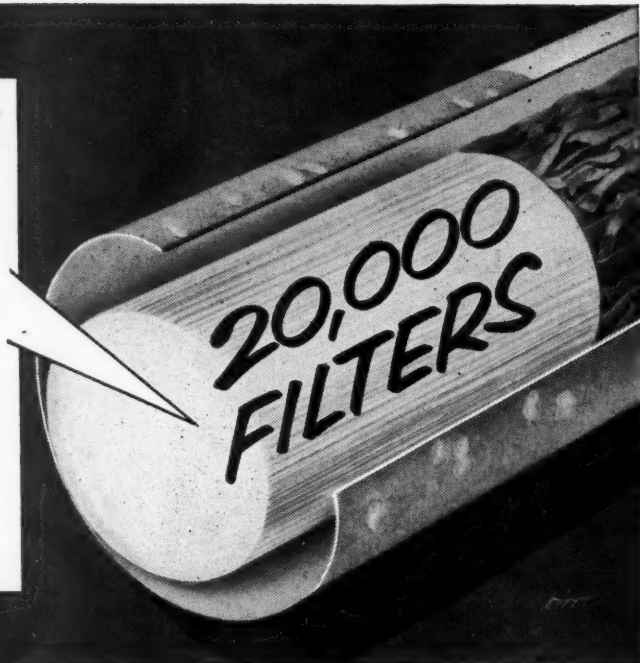
(Continued on Page 392)

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GLAUCOMA IN GENERAL MEDICAL PRACTICE

(Continued from Page 390)

toms relating to the recognition of glaucoma. Undoubtedly many other ophthalmologists throughout the United States can be counted on for similar services. The necessity for this specialized instruction has been more fully appreciated during the last few years in which glaucoma has been recognized as a major cause of visual impairment. Since most patients over thirty years of age may be seen only by general practitioners, it appears to devolve upon them to detect glaucoma in the early stages because the patients may have no symptoms which lead them to suspect the presence of this serious eye disease.

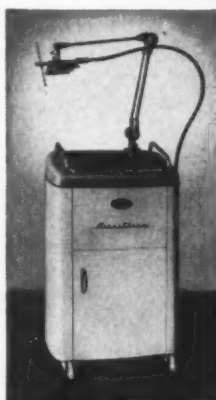
General practitioners have always met their great responsibilities with constructive action, and they may be counted on to co-operate in the detection of glaucoma which is so important to the patient's vision and health.—CONRAD BERENS, M.D. in *New York State Journal of Medicine*, January 15, 1956.

LOCAL ANESTHESIA—A LOST ART?

"Some months ago, an anesthesiologist was approached by a surgeon with the following query, 'Will you handle Mrs. X in the morning, she's a rather difficult problem.' The former consented readily (the operation was posted as the removal of a growth on the face). Thinking that the growth was malignant and that possibly its removal was to be combined with a neck dissection, he thought little of the request. The patient in question turned out to be eighty-four years of age. She had been digitalized for the previous eighteen years and was at best a very poor candidate for any type of surgery and an extremely poor anesthetic risk. On further inquiry, it was discovered that the excision of a small nevus was being done at the patient's insistence since she feared the development of cancer. The patient had not anticipated general anesthesia and was well pleased when she discovered that she did not have to go to sleep. The surgeon was somewhat abashed when the suggestion was made that local anesthesia be used. Under many circumstances, the very best anesthesiologist is no substitute for a properly administered local anesthetic. Yet in the past twenty-five years, surgeons have been 'slipping away' from the use of local anesthesia, some even reaching the point of apparently forgetting that local agents exist."—Editorial in the *Journal of the Medical Association of Florida*, October, 1955.

A lady, who had entered a contest with John L. Lewis to decide which of them had the largest and bushiest eyebrows, was heard to exclaim, "He browbeat me."—*The Mediator*, December-January, 1955-56.

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APRIL, 1956

NUMBER 4

Functions of a State Cancer Co-ordinating Committee

By Harry M. Nelson, M.D.
Detroit, Michigan

FEW subjects have held the attention of the health-conscious public more closely in the last few years than the cancer control problem. Each day, the problem comes further into the public spotlight, as newspapers, radio, television, magazines, and other media shed their former reluctance to mention cancer and are raising the curtain of silence which so long impeded the spread of knowledge about the disease.

As public apathy toward cancer diminishes, more and more people are being drawn into various phases of the control effort. This newly-kindled interest has enabled organized medicine, agencies and institutions engaged in combatting the disease to expand their programs, to add more personnel, to train new people, and to forge ahead in the work which has been so tragically delayed.

Increasing funds have been made available. This year, Congress appropriated \$24,828,000 for cancer control. Of this amount, \$16,246,000 are for grants-in-aid outside the U. S. Public Health Service. They include research fellowships to young scientists, grants to medical schools for teaching of cancer and for specialists such as virologists or cytologists; support for state programs of cancer control such as clinics, education, et cetera, and field investigations of such cytology pilot projects as that in Memphis and Detroit.

The remainder of the governmental appropriation is for the operation of the great new Clinical Center at Bethesda, Maryland, and the fundamental research at the National Cancer Institute.

Last year, the American Cancer Society raised

approximately the same amount of dollars as Congress appropriated, that is, \$24,400,000. The 1956 goal of the Society is \$1,600,000 over that amount. Of this, 28 per cent will be allocated to research. A grand total of around \$25,000,000 is now made available annually for cancer research.

The American Cancer Society's annual campaign in 1955 raised approximately \$24,000,000—more money than ever before donated by the public for cancer research, education and service. Compare this with 1946, when the Cancer Society made its first large appropriation of \$2,500,000 for research, and other agencies, both governmental and voluntary, were spending only an additional \$500,000.

It has been estimated that cancer will at some time strike one in every four Americans, or 40,000,000 Americans now living will at some time develop cancer; 25,000,000 will die unless new treatments, cures or preventive measures are found. This impending tragedy makes it imperative to utilize the wisest possible expenditure of manpower and funds for cancer control.

There has been a determined effort in the United States, from the national to the local level, to eliminate, as much as possible, duplication of effort, time and money spent in cancer control. The United States public health program, integrated closely with the work of the American Cancer Society and supplemented by the efforts of private foundations and medical schools, has helped to instigate a united attack on the disease

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on all fronts. To be certain that the public's money, both private and taxed, is spent to the best possible advantage and with the least duplication, the National Cancer Institute of the United States Public Health Service and the American Cancer Society work closely together. In fact, their boards are inter-related. The Society has stimulated governmental appropriations for cancer activity, and each year has arranged testimony in support of the National Cancer Institute budget. As a result, the National Cancer Institute last year received the largest appropriation in its history, including a substantially increased research allotment.

Recently, the American Cancer Society appointed a committee to study the problem of cancer quackery. Its chairman is Donald Johnson of Flint, Michigan, who is a national director of the Society. Cancer quackery has always been with us, but in recent years it has been exploited and publicized to an extent where many lives are being lost and great sums of money are being fleeced from an unsuspecting public. This committee co-operates with the national Committee on Diagnosis and Therapy, which was appointed by the National Research Council, and endorsed or sponsored by the American Cancer Society, the National Cancer Institute, American Medical Association, Damon Runyon Fund, and the Pure Food and Drug Administration. These committees offer assurance that doctors are ready to receive and examine new responsible methods of diagnosis and treatment from any source.

The American College of Surgeons, with the co-operation and assistance of the Cancer Society, both nationally and locally, has established an accreditation requirement for hospitals conducting cancer programs. As of December 31, 1955, any hospitals desiring approval of the College of Surgeons, must have a properly functioning cancer registry in operation, which records every patient, private and public, in-patient and out-patient, upon whom the diagnosis of cancer is established.

Organized medicine on a national scale has indicated increasing interest in the development of effective liaison between voluntary health agencies, official health agencies, and the American Medical Association. It has established a committee on relationships between medicine and allied health agencies, known as the Shipman Committee. Its aims are to assist in the development of constructive programs, legislative and otherwise;

to insure the co-operation of medicine and the voluntary health agencies in accomplishing its objectives; to influence the voluntary health agencies to plan their programs in such a way as to preserve in individuals and families the sense of their responsibility for their own medical welfare; and to co-ordinate the efforts of voluntary health agencies and public health.

Just as the need to co-ordinate cancer control on a national level is recognized and is being achieved, there is a tendency to develop inter-related co-ordinating committees on a regional and community level. This is most important because it is at the neighborhood level where immediate and real relief can be obtained and where the social burden, the economic loss, the mortality, and long term invalidism can be alleviated.

The most important agencies operating on a community level in cancer control in most of the states in the United States are:

1. The American Cancer Society, the only voluntary health agency in the United States devoted to the control of cancer through a comprehensive program of education, service and research.
2. The cancer committees of the state medical societies. Most county medical societies also have cancer committees which work closely with the American Cancer Society on community levels and supervise the medical activities of the American Cancer Society.
3. State and county health departments have cancer control divisions which co-operate with other agencies in state-wide programs.

So closely related are the programs of some of these organizations, that there is often unintended duplication of programs, resulting in unfortunate expenditure of time, effort and funds—a waste which might have been prevented by the joint exchange of ideas, plans and experience.

There can be a real force behind the suggestions offered by a well-integrated, devoted committee. The State of Pennsylvania has developed the most ideal cancer co-ordinating committee and Michigan has formed its committees along this pattern. From viewing the work done in Pennsylvania and in Michigan, I believe that a still stronger unity can be achieved between the participating agencies and the American Cancer Society. The prime impetus must come from determined effort and complete, unselfish dedication. However, in order to channel this effort properly,

STATE CANCER CO-ORDINATING COMMITTEE—NELSON

the mechanics of the committee must be formed to provide a smooth working unit from which new programs can evolve.

Today about one-half of the American Cancer Society's sixty divisions are members of cancer co-ordinating committees. In most instances, however, those that have not established such a committee, have representatives of the medical society, the health department, medical schools and dental societies on their own local executive committees or boards of directors.

In actual practice, there is a wide range of difference in the duties and authority of the various co-ordinating committees. It has been shown that the committees function most effectively when they act in a purely advisory capacity. The purpose and the action of the committee are defeated when they are delegated administrative and program responsibilities.

Equally impractical is the belief that adequate leadership can be obtained through a well trained and experienced individual acting as administrator for the cancer co-ordinating committee and thus for the entire control program throughout the state. Besides subjugating the power of the committee, the administrator cannot efficiently advise the allocation of funds, since their sources differ so greatly. For example, taxes are the source of the health department's income; voluntary contributions, of the American Cancer Society's; and dues, of the medical societies'.

Ideally, the American Cancer Society, the state medical societies, the state department of health and, in some instances, the medical schools and dental societies should have an opportunity to merge in a co-ordinated effort. Co-ordinating committees, composed of representatives of each of these organizations, can be of tremendous help in eliminating waste of funds and effort and can strengthen the inter-relationships of the various groups.

The co-ordinating committee meets regularly to review and evaluate the activities of the several agencies, advise continuation, change or discontinuance of their activities. The committee's decision must be subject to the approval and action of the involved agency but, through their decision, must attempt to encourage direct cooperation between the separate agencies.

At an annual meeting, the programs, financial report, and plans for the following year are thoroughly scrutinized by the entire committee. Sug-

gestions for the improvement of existing or contemplated programs are made and some "weeding out" of ineffective approaches, as well as rejection of new proposals, often occur.

In most instances, as in the State of Michigan, appointments to the co-ordinating committee are made annually by their participating agencies. The appointees serve for the following full calendar year, or until their successors are duly appointed. Officers are a chairman, a vice-chairman and a secretary, who are elected annually. Meetings are held at the discretion of the chairman or at the request of any of the agencies. Expenses that are incurred and approved by the committee are paid on a pro-rated basis by the component agencies.

Ordinarily, the chairman is a member of the cancer committee of the state medical society. He renders reports of the co-ordinating committee to the Council of the medical society, and members of the committee report back to their respective organizations.

The cancer control program in most of the states consists of lay education, professional education, diagnosis and treatment of cancer, in combination with a statistical program, a research program, a campaign for funds, a financial report, and plans for the future. Where there is a cancer co-ordinating committee, the responsibilities of the member organizations are generally defined as follows:

Lay education seems to be primarily a function of the American Cancer Society. The Society prepares, executes and finances publications. It prepares magazine, newspaper, radio and television materials, posters, speeches, films, exhibits and other educational media from basic material provided by the state health department and the cancer committee of the state medical society. It also maintains information centers in urban communities, promotes cancer education in business and industrial organizations, arranges talks to lay groups by physicians or trained personnel, and encourages cancer education in secondary schools and colleges. In the development of school educational programs, it is generally felt that a strong union of our forces can be of considerable assistance. American Cancer Society divisions, operating individually, have experienced some difficulty in arousing the school administrators' interest in making cancer education part of the regular curriculum, but with the combined efforts of strong, influential and talented representatives of the co-ordinating committee agencies, an ap-

STATE CANCER CO-ORDINATING COMMITTEE—NELSON

proach might be extremely successful. The committee should encourage teacher training institutes to meet the needs for school health programs through adequate pre-service and in-service training, in addition to promoting the use of material which has already been developed for classroom use.

Professional education is generally assigned to the medical and dental societies, with "tools" which have been produced and made available by the divisions of the American Cancer Society. The members of the state medical society, with the cooperation of the county medical societies and the state department of health, prepare and publish articles in the medical journals. They also prepare specific factual information for distribution to all practicing physicians. These organizations also sponsor conventions, symposia, movies and exhibits, refresher courses, fellowships, intern and undergraduate training. Many of these programs are often subsidized by grants from the ACS. Excellent implements for professional education are available from the Cancer Society nationally. Such facilities include films, a cancer library, speakers, film loan library, publications, exhibits and lantern slides on various phases of the picture. Actual training of public health nurses, statisticians, and social workers with reference to cancer is done by the state health department.

The diagnosis and treatment of cancer is relegated to the cancer control committees of the state medical and dental societies. The medical society encourages detection examinations of well persons in both doctors' offices and in detection centers. It also sponsors tumor clinics and registries. Financial assistance for examinations in detection centers and physicians' offices may be provided by the ACS and the state health department.

Statistical studies into the morbidity and mortality of cancer is usually a function of the state department of health, which also promotes and supports tumor clinics throughout the state. The sum of \$2,500,000 was given by the U. S. Public Health Service last year to state health departments for the establishment of clinics and services to cancer patients. The grants to states are made on a population basis.

Since every approved cancer hospital must have a registry, the department of health can contribute to the effectiveness of the registry by providing assistance to the hospitals in establishing a registry. Vital statistics furnished by the health de-

partment has been found to save time, effort and embarrassment, since the knowledge of death of a patient precludes the necessity for attempting other methods of follow-up. The task of raising funds for cancer control is primarily the function of the American Cancer Society.

Because of the complexity of the cancer research problem, co-ordination must necessarily be achieved nationally. The ACS is the major voluntary agency supporting cancer research. It exchanges complete information on grants with the other voluntary cancer agencies, thus avoiding duplication of effort, and enabling applicants for financial assistance to contact the agency most likely to make a grant. I already have mentioned the close working relationship between the National Cancer Institute, the National Research Committee and the American Cancer Society. State or county units supporting research are encouraged to clear their projects with the national office. To do otherwise might seriously jeopardize the effectiveness of the national research program.

The consensus among those most intimately concerned with the problem of cancer quackery and its minimization is that the greatest effect can be obtained by attacking the problem at the state or local level.

The cancer commission of the California Medical Association has been the most successful in meeting the problem of the unorthodox in cancer. It disseminated widely a statement on cancer treatment, and invited any proponent of any treatment for cancer to submit the method with proper documentation, for adequate trials by responsible, impartial investigators—with the understanding that the results of such testing, whether favorable or unfavorable, would become a matter of record. Our cancer co-ordinating committee has embarked on a similar program.

All agencies represented in the cancer co-ordinating committee should be requested to make known funds available to them for the next year, and also an outline of objectives and plans for the ensuing year.

With an interlocking organization, a regulatory function over the statewide cancer control program can be maintained. If all the agencies, as they do in some states, cleared new programs through the cancer co-ordinating committee, a very effective liaison could be maintained. Specifically, the committee would: co-ordinate programs and strength-

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APRIL

What Cancer Means to Industry— and Vice Versa

By David M. Reed and
Arthur S. Albright
Detroit, Michigan

QUESTION: *Everyone knows that the economic losses from cancer are startling, Mr. Albright. As a veteran electric utility executive, have you ever translated the figures into terms of your own industrial specialty?*

ANSWER: I certainly have. Only recently, I read that more than 113,000 man-years are lost to industry each twelvemonth from cancer disabilities. In terms of the electric power industry, this represents enough working time to build twenty giant power stations the size of Detroit Edison's St. Clair generating plant, or in other words enough brand new power plants to serve the entire light and power needs of all the 25,000,000 people who live in Michigan, Ohio, and Illinois. The annual man-hour loss from cancer is equivalent to the total amount of time worked by *all* of the employees of a company like Detroit Edison for a period of ten years.

Q.: *Facts like these set one to thinking, too, of what the cancer toll means in terms of industrial personnel. What about this?*

A.: These facts make me think that of the approximately 12,000 men and women now working at the Edison Company, about 3,000 will have cancer at some time. But the important thing isn't what I think—it's the fact that many of these potential casualties can be and may be saved that's important.

Q.: *What about losses to industry in key executives?*

A.: In answering this, may I say that my first incentive to join in American Cancer Society work came with the death, a number of years ago, of

An interview with Arthur S. Albright, Detroit Edison executive vice president, retired.

Mr. Reed is editor of Press Information Services, the Detroit Edison Company.

Mr. Albright has been an active worker in the program of the American Cancer Society for many years, first as a committeeman and director of the Southeastern Michigan organization and later as a representative of the national group. His first interest in the program was aroused by the tragic inroads of cancer among his fellow-executives in the electric power business.

one of our own key men. He was a distinguished scientist and former university professor who headed the Detroit Edison Research Department. This man was as nearly indispensable and irreplaceable as anyone could be. He was stricken at the height of his productivity. And now, within a relatively few intervening years, other key Edison men have been lost, for example:

The company's vice president in charge of sales.
The controller for the company.

An eminent member of our legal counseling firm.

The vice president in charge of personnel.

Our senior vice president, a man exceptionally distinguished in service to the Detroit community.

The value to an industry of men like these can hardly be assessed. All would have had years of service before them.

Q.: *Could you give an estimate on the number of leaders lost annually through cancer in such a company as Detroit Edison?*

A.: Yes, by reference to figures furnished by Dr. Lyndle Martin, director of Edison's medical department. The company has about 1,200 employees who are classified as supervisors. Dr. Martin says we can expect six or seven cases of cancer among this group each year. Throughout the company, the rate of occurrence is between sixty and seventy cases a year.

Q.: *What does this mean to the company, economically?*

A.: The answer to this depends, of course, on the percentage of people actually disabled or lost out of the total number afflicted. Dr. Martin estimates that about half the cases discovered in a year result in total and permanent disability. This is hard to evaluate—but probably would add up to \$100,000 or more in time loss and compensation.

Q.: *What has been and is being done on the cancer problem in your company?*

A.: A great deal, I am happy to say. The

WHAT CANCER MEANS TO INDUSTRY—REED

Detroit Edison medical department is one of the oldest and at the same time most modern industrial medical establishments in Southeastern Michigan. The staff has always emphasized "cancer-alertness" as much as possible. Percentage of cases detected reasonably early has been high, I believe, with a resultant good proportion of cures, especially in skin, mouth and stomach types of malignancy. Dr. Martin estimates that about 30 per cent of cases detected are cured through early and adequate treatment.

Q.: Will you please name some of your company activities aimed at cancer control?

A.: Most of these activities, outside of diagnosis and treatment, are educational. Our program, I am glad to report, follows quite closely the educational measures urged by the American Cancer Society.

Q.: Could you tell us some of the specific things Detroit Edison has done?

A.: Yes, for one thing, we have made quite extensive use of posters and bulletins calling attention to the fact that cancer, treated early, is curable. Also, with assorted visual material, we have tried to make employes aware not only of the "seven danger signals," but of the futility of "quack" therapy—treatments other than by x-ray, radium and radio-active isotopes, or surgery. We have shown the American Cancer Society's film, "Breast Self-Examination," to all of our women employes, and have shown other cancer films to various employe groups.

Q.: What other means of education have you used?

A.: One other, in particular, which I think is very important and effective. We have on occasion published cancer information in our company magazine, which goes to every one of our employes and is read with great interest both by employes and their families. We estimate total readership at between 30,000 and 40,000.

Q.: In your conversations with Dr. Martin, Edison's medical director, what conclusions have you drawn as to the biggest problem in cancer education?

A.: My main conclusion is an obvious one with which I am sure Dr. Martin would agree. The biggest obstacle is *fear*—usually grounded in the

agonizing experience of losing a dear one to cancer. For many people, the mere mention of cancer darkens the day, dims hopes for the future, dampens the joy of living. This kind of fear, often ingrained in youth, is strong enough to impel retreat from—rather than recognition of—the facts of cancer.

Q.: Is there any way to combat this rather unreasoning fear?

A.: Our medical people seem to think this obstacle is very nearly insurmountable in older persons. But with young people—to whom industry has clear access in its new-employe groups—the picture is much brighter. By establishing cancer-detection procedures as common-place everyday practice, medical people believe they can lead young minds toward regarding the facts of cancer reasonably and accepting the procedures for the routine thing they will some day be. Our own medical staff members believe that there is another advantage besides the mere curbing of fear. Cancer detected in its early stages has excellent prospects for cure. Through educating its employes to the importance of having regular physical examinations and recognizing cancer's danger signals, industry can contribute greatly toward reducing cancer fatalities.

Q.: Fear, then, is the chief obstacle in cancer education, in your opinion. What do you think the biggest problem is in cancer research?

A.: Money. I understand that only about \$25,000,000 a year is available in federal and voluntary agency funds for this purpose. This is only \$110 per cancer death annually—or something like \$36 per known case. This is about *one dollar* per American now alive who will die unless new treatments are found.

Q.: How does this compare with expenditures on other diseases, and on expenditures for non-essential or luxury commodities?

A.: Very badly. For example, I have read that for the \$110 per death we spend on cancer, we spend at least \$1,200 per death on infantile paralysis. And for the \$25,000,000 spent on cancer research annually, we spend \$65,000,000 on ball-point pens, \$60,000,000 on lipstick and nail polish, and nearly *four and a half billion dollars* on cigarettes.

WHAT CANCER MEANS TO INDUSTRY—REED

Q.: How about industry's direct expenditures on research in general. Does any of this work apply to cancer control?

A.: Indeed it does, particularly in the field of atomic studies. Industry is spending astronomical sums in probing the atom's secrets. And much of what is being learned brightens the prospects of conquering cancer. For example, we already have isotopic "tracers"—useful both in diagnosis and treatment. And the radioactive Cobalt 60, discovered in the course of fission studies, is particularly effective in radiological therapy. Industry's expenditures on nuclear research are, and will continue to be, a tremendous source of new knowledge applicable in cancer control. Contacts with nuclear researchers, made by me in the course of my company's nuclear power development activities, have convinced me that the conquest of cancer may well appear through atomic research.

Q.: You have told us much of what your company is doing, Mr. Albright. Could you sum up your recommendations on what U.S. industry in general can do to save its people and to win from

cancer the 226,000,000 man-hours that are annually at stake?

A.: In answer to this, and in conclusion, I have five suggestions for individual industries.

1. Realize fully that nowhere near enough money is being spent on cancer, and adjust corporate contributions accordingly.
2. Support any nuclear research that applies economically to your industry. By-product discoveries in such research may conquer cancer.
3. Educate your people and their families through the powerful medium of employee communications and publications.
4. Alert your industrial medical facilities to co-operate in the program of employee education, the scrutiny of suspicious cases, referral of them to physicians or clinics, and adequate follow-up.
5. Get in touch with your nearest American Cancer Society Unit and let it help you arrange an educational program for your employees, utilizing the many excellent tools, such as films, literature, posters and speakers, which are available.

FUNCTIONS OF A STATE CANCER COORDINATING COMMITTEE

(Continued from Page 404)

en relationships among member groups, act as a clearing house for plans and proposals for the programs of the member groups, and agree on the areas of major responsibility for each of the member groups.

In addition, the committee could: help strengthen the ACS and its thousands of volunteers in rural cancer education programs, assist in its persuasion of men over forty-five years of age to have chest x-rays twice a year, assist in teaching the public to have regular physical examinations, help to strengthen and broaden business and industrial programs by enlisting the interest and active participation of labor-management leaders, attempt to bring the ACS cancer education program to every community, strive toward wider utilization of already existing "tools" of professional education, expand and improve professional sessions at medical society and American Cancer Society meetings, seek to attain greater visibility of the ACS service program at all levels of operation.

Its influence would further extend to gearing the services offered by the county ACS units down to the local level, standardizing and promoting

these services. The committee would also promote the organization of a greater number of tumor clinics, promote at least one annual scientific cancer program at each county medical society, promote cancer educational programs for ancillary medical groups, such as nurses, technologists, dentists and pharmacists, and further studies in the morbidity and mortality of cancer in various parts of the states.

Thus, all the talents, finances, services, and facilities of each agency would be used to insure success of the various phases of the cancer control program originally assigned as the total responsibility of one of the agencies.

Under such a system, the various agencies retain their autonomy with active medical control—realized through the joint agreement of the participants.

With the achievement and realization of this cancer co-ordinating committee reaching into every state, combining effectively the efforts, facilities, and minds of all the great agencies and organizations engaged in this mighty effort, we will surely succeed.

Squamous Cell Carcinoma

Development in the Skin around a Colostomy Sixteen Years after X-Ray Treatment for Carcinoma of the Colon

By E. T. Thieme, M.D.
Ann Arbor, Michigan

THIS case is considered of sufficient interest to report because of the development of squamous cell carcinoma of the skin around a colostomy that had been the site of stasis and chronic sepsis for many years. This carcinoma caused the demise of the patient; therefore, this case offers a warning in the care of colostomies.

Sixteen years earlier, the transverse colon with its adenocarcinoma was exteriorized and then destroyed with x-ray therapy. That a cure of that carcinoma was obtained only indicates that the lesion was still localized to that part of the bowel, and it is of historical interest only. There were several unusual problems in the treatment of this patient that are also worthy of comment.

Case Report

Mrs. M. R. was a fifty-seven-year-old housewife when first admitted to St. Joseph Mercy Hospital, Ann Arbor, June 8, 1936, because of the symptoms compatible with carcinoma of the large bowel. X-rays demonstrated a constricting lesion of the transverse colon. At laparotomy on June 16, 1936, a freely movable lesion of the mid-transverse colon was found with enlarged mesenteric nodes but no distant metastases. A biopsy was reported as adenocarcinoma. The bowel and mesentery were exteriorized, and the abdomen closed. Following recovery from this operation, x-ray therapy was given to the exteriorized bowel to the extent of 3600 r in divided doses of 600 r each. The bowel sloughed away, and the patient was discharged July 6, 1936. She was re-admitted August 8, 1936, and an additional 600 r was given to the colostomy site. She was re-admitted in January, 1937, because of hemorrhage from the colostomy border. This stopped promptly, and the patient was discharged. At that time her colostomy was working well but was noted to be recessed below the skin margin. Despite the pooling of feces around and on her colostomy, the patient was quite satisfied, particularly as her hemorrhoids of twenty years' duration were now quiescent.

She sought no medical advice until October, 1952. At this time she consulted her doctor because of a painful ulceration about her colostomy which had been increasing in size, despite poultices, ointments, and other home remedies, for about one year. Under local

anesthesia biopsy was done, which was reported as showing squamous cell carcinoma of the skin. She was re-admitted to St. Joseph Mercy Hospital January 27, 1953, sixteen years after her last admission and sixteen and one-half years after the treatment for adenocarcinoma of the transverse colon.

At this time she appeared as a spry, alert, but very frail woman of seventy-four years. Her physical examination was not remarkable except for the abdominal findings. Just above the umbilicus there was an ulcerated, indurated area 6 by 4 inches. Feces were pooled in this area, and the proximal end of the colostomy could be identified. The liver and spleen were not palpably enlarged, and there was no evidence of ascites. There were no palpable masses and no lymphadenopathy. The chest x-ray was normal. Laboratory work showed a moderate secondary anemia corrected by two 500 cc. blood transfusions.

In considering treatment, wide excision of the abdominal wall and the colostomy site was the primary objective. Re-establishment of bowel continuity seemed logical, but we could find no information in the surgical literature concerning the possible use of a colon defunctionalized for sixteen and one-half years. This problem was easily settled, as the patient would not consider it; she was happy with a colostomy and feared the recurrence of her hemorrhoids. Also, a barium enema demonstrated a patent rectal ampulla, but no barium could be forced into the atrophied sigmoid colon.

Therefore, on January 31, 1953, a wide excision of the abdominal wall and colostomy was done. There was no evidence of metastasis. The right colon was mobilized and placed in the right lower quadrant as a new colostomy. The left colon was closed and dropped into the abdomen. The resulting defect in the abdominal wall measured 9 by 4½ inches. This was closed by the use of a tantalum mesh gauze screen. The liver, gall bladder, duodenum, stomach, large and small bowel lay in direct contact with this. The skin could not be closed over this despite wide undermining until the patient was placed in semi-Fowler's position.

Her postoperative course was quite satisfactory. The head of the bed was gradually let down until she could lie flat. The wound healed without infection, and her colostomy worked well. She was discharged her twelfth postoperative day.

The pathologist reported squamous cell carcinoma, histologically grade II, infiltrating entirely through the

SQUAMOUS CELL CARCINOMA—THIEME

corium and also the mucosa and wall of the large bowel at the colostomy site. The surrounding skin exhibited a moderate degree of perivascular infiltration of plasma cells and lymphocytes.

She returned to the out-patient department October 14, 1953, because of a draining sinus in the left groin centered in a hard mass approximately 2 by 3 inches. A biopsy was done, and the tissue was reported as showing metastatic squamous cell carcinoma. She returned home but failed rapidly, returning to the hospital two months later to die December 29, 1953.

An autopsy was performed, which showed a large ulcerating and infected mass of squamous cell carcinoma in the left groin and left lower abdomen. There was no primary neoplasm in the pelvic organs. The abdominal wound had no residual neoplasm. There was an active duodenal and gastric ulcer as well as terminal bronchopneumonia. The left colon was a rigid tube without lumen, but microscopically all layers were preserved. There was no evidence of damage to the abdominal viscera nor evidence of intestinal obstruction caused by the direct contact with the tantalum mesh.

Discussion

The development of squamous cell carcinoma of the skin about a chronic draining sinus has been reported as occurring in cases of chronic osteomyelitis^{1,2} and in a fistula *in ano*^{3,4,5} of long standing. We were unable to find a report of such an occurrence about a colostomy.

There are two factors to be considered in the etiology of this skin cancer. One was the use of x-ray to the bowel. Despite protection, the skin must have received an unknown, but perhaps significant, amount of radiation. The development of cancer in skin previously treated or exposed to x-ray is described in all textbooks of dermatology. The skin changes prior to the malignant degeneration are quite typical, the course of events being that of telangiectasis, hyperkeratosis, and atrophy; then malignant degeneration.^{5,6,7} These changes were not apparent grossly or microscopically in this case, but were obvious in the case reported by Scott.⁸ The second factor was that of chronic stasis and sepsis over a sixteen-year span. This, as in the cases of osteomyelitis and fistulas, would appear to be the more important factor.

Carcinoma arising in a chronic fistula *in ano* probably remains localized for some time and, if treated by adequate surgery, a cure may be expected. However, there are few follow-up studies reported to clarify this point. Carcinoma developing in a chronic sinus of osteomyelitis may rarely metastasize.^{7,9} Usually local treatment is sufficient, although here again follow-up studies are

inadequate. In this case reported, although the local lesion was eradicated, metastasis from the squamous cell carcinoma developing about a colostomy was the primary factor in the death of the patient. Certainly, as more patients pass the ten year mark after colon surgery for cancer, the possibility of this serious complication of colostomy may be expected to increase. Therefore, such patients must be checked at regular intervals to be sure that their colostomy does not allow pooling of fecal material on the skin and that proper cleanliness is observed. Treatment is primarily that of prevention. However, any established break in the skin must be biopsied promptly and radical surgery done if carcinoma is present in the skin.

This case cannot be reported as a cure of colon cancer by x-ray treatment. In this instance, x-ray was not used in the accepted manner as treatment, but rather as a means of completing an "obstructive resection" by destroying the bowel. A knife or cautery would have achieved the same result as satisfactorily, and certainly more quickly. Such a method of treatment, although successful in this case, has no place in the present treatment of colon cancer.

Several of the problems in the treatment of this case are of interest. Many patients, when faced with the necessity of a permanent colostomy, are greatly disturbed. Yet this patient would not consider the re-establishment of bowel continuity, as she considered her colostomy much less of a problem than the possibility of recurrence of the hemorrhoids. There appears to be no exact information concerning the time a bowel can be de-functionalized and still be used again. In our own experience, the left colon has been successfully used again after five years of disuse. In the case being reported, after sixteen and one-half years, the left colon was a rigid, atrophied tube, but microscopically all layers were intact. Although the rectal ampulla was still patent, it is very doubtful that the colon could have been dilated by enemas or any other means to the extent of being adequate for use. Tantalum mesh gauze has been used frequently to close large defects in the abdominal wall. In this patient, liver, stomach, and large and small bowel were in direct contact with the under surface of the mesh. The result was very satisfactory over this short, eleven-month

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Thyroid Carcinoma Treated with Radioactive Iodine

An Eight-Year Experience

By William H. Beierwaltes, M.D.
and Phillip C. Johnson, M.D.
Ann Arbor, Michigan

TWO days before Pearl Harbor radioactive iodine was administered to a patient for the first time in the treatment of carcinoma metastatic from the thyroid gland.^{1,2} By 1952 more than 250 patients with this disease had been treated with radioactive iodine.³ In spite of several excellent reports⁴⁻¹¹ on this form of therapy for carcinoma of the thyroid, many questions remain to be answered:

Is radioactive iodine, I^{131} , ever indicated when biopsy of the thyroid reveals the presence of undifferentiated carcinoma? Are the indications for its use more commonly present in youth or in older age groups? Is it worthwhile to perform radical neck dissection for cervical node involvement by thyroid carcinoma if the carcinoma appears to concentrate I^{131} ? Now that I^{131} is commonly used, when is x-ray therapy indicated? Should an attempt be made to "cure" the patient with a few large doses of I^{131} , or should smaller palliative doses be given as symptoms or signs prove bothersome to the patient? About what total dose of I^{131} can be expected to exhaust the patient's total body radiation tolerance? Can young women have normal pregnancies after the patient has received large amounts of radioiodine? Have any patients been apparently rendered free of all previously visible metastases by radioiodine therapy?

Obviously, we cannot give a final answer to these questions, but we have critically reviewed our eight-year experience in an attempt to throw light on these and many similar questions before proceeding to treat more patients with cancer of the thyroid with radioiodine.

Material and Methods

When patients were referred to the clinical radioisotope unit for radioiodine, I^{131} , treatment of

carcinoma of the thyroid, certain preliminary diagnostic and therapeutic steps were advised. If the patient merely had a nodular goiter that was thought to harbor carcinoma, the referring physician was advised to excise the nodule or nodules with some of the surrounding "normal" tissue and a few cervical lymph nodes, normal or abnormal in appearance, usually Delphian¹² or lateral in location. We urged that thyroid nodules and cervical lymph nodes be sent to the pathologist for immediate frozen section examination, carefully labeled as to original anatomical location.

If the pathologist reported that carcinoma was present in tissue removed from the thyroid gland, bilateral total surgical thyroidectomy was advised. If cervical nodes from one side of the neck were demonstrated to contain thyroid carcinoma and distant metastases were not demonstrated, a radical neck dissection was advised on that side of the neck during the same operation. If carcinoma was demonstrated in cervical lymph nodes from the opposite side of the neck, radical neck dissection was occasionally carried out on that side one and a half to three months later. Total thyroidectomy was advised regardless of the extent or location of metastases in order to prevent death in the future from compression or invasion of the structures in the neck, especially the trachea, esophagus, and tributaries to the superior vena cava; to insure removal of an adequate biopsy specimen; and to decrease the blood level of circulating thyroid hormone so that the pituitary might be encouraged to secrete an increased quantity of thyroid stimulating hormone, TSH, to stimulate metastases to concentrate I^{131} with increased avidity.¹³

The use of x-ray therapy was advised whenever a total thyroidectomy had been carried out with or without a radical neck dissection, and there was reasonable suspicion that thyroid carcinoma still remained in cervical lymphatics but was not

From the Department of Internal Medicine, University Hospital, Ann Arbor, Michigan. The expense of this study was defrayed in part by grants from the Michigan Memorial Phoenix Project and American Cancer Society.

present in other areas of the body. The use of x-ray therapy was also advised in preference to I^{131} in obvious inoperable carcinoma of the thyroid, very rapidly growing, where biopsy revealed small or large cell carcinoma or lymphosarcoma of the thyroid.

After these preliminary considerations the histologic sections were examined carefully for evidence of colloid production by the carcinoma. If colloid (stored thyroid hormone) was found, it was decided that this carcinoma would probably concentrate one of the raw materials necessary to produce thyroid hormone, namely, iodine, or I^{131} . This probability was put to test in all patients by the administration of a tracer dose of I^{131} to the patient followed by external counting over the area suspected of harboring carcinoma. In addition, in many patients autoradiography was carried out on specimens of thyroid carcinoma removed, blood radioiodine levels were determined, and urinary excretion of I^{131} was followed. Normal levels for the basal metabolic rate, serum cholesterol, and serum protein bound iodine, PBI, indicated the presence of functioning carcinoma of the thyroid in patients who had had a total thyroidectomy.

If a patient had had adequate surgical and x-ray therapy and was demonstrated to concentrate I^{131} in thyroid or metastases, he was hospitalized, given his treatment dose of I^{131} , and his urinary excretion was followed to decide when his body content of I^{131} had dropped to less than 30 millicuries so that he could be discharged from the hospital in accordance with Atomic Energy Commission Standards.¹⁴ He was given no medication and was asked to return in three months for a repetition of stereo chest roentgenogram, basal metabolic rate, serum cholesterol, PBI, and I^{131} tracer tests of any residual thyroid carcinoma. If functioning thyroid carcinoma was demonstrated, another dose of I^{131} was given.

This sequence of studies and treatment was repeated until the patient became totally myxedematous and his carcinoma was apparently gone or failed further to concentrate I^{131} . The patient was then given desiccated thyroid until he was clinically euthyroid. He was asked to return every six months from then on, off thyroid for six weeks, for a repetition of the diagnostic studies outlined above. If no carcinoma was found, or found to concentrate I^{131} , the patient

resumed his thyroid medication, and, as just outlined, returned every six months for three years, then once a year for two more years, then only at the request of his referring private physician.

BY DECADES	COLLOID	NO COLLOID
0-10	5	0
10-20	6	2
20-30	3	4
30-40	5	1
40-50	6	1
50-60	1	4
60-70	4	10
70-80	0	3
80-90	0	1

Fig. 1. Age distribution.

During the period extending from 1947 through 1954, fifty-seven patients with carcinoma of the thyroid were given a dose of over 3 millicuries of I^{131} as treatment of thyroid cancer. Each patient was examined by the senior author.

Results and Discussion

Age of Patient and Colloid Production of Carcinoma.—Figure 1 presents the age distribution in decades of the patients treated correlated with the histological morphology of the thyroid cancer reported by our pathologists. Patients with colloid formation in their cancer are grouped under the left-hand column headed "colloid." Our pathologist usually reported the specimens as "adenocarcinoma" or "papillary adenocarcinoma." The patients with colloid-forming carcinoma ranged in age from three to sixty-three years, with an average age of thirty years. Patients with more undifferentiated carcinoma possessing little or no visible colloid ranged in age from fourteen to eighty-six years with an average age of fifty-two years. It is important to note that if colloid formation is a good prognostic sign in the treatment of carcinoma of the thyroid with I^{131} , the majority (83 per cent) of persons in this selected study under age fifty are good candidates for I^{131} and the majority (65 per cent) of persons over age fifty are poor candidates (Fig. 1).

Presenting Symptom.—Thyroid carcinoma in children usually appears with a cervical node

THYROID CARCINOMA—BEIERWALTES AND JOHNSON

metastasis as the first sign of thyroid cancer ("lateral aberrant thyroid" syndrome).¹⁵ Figure 2 presents data showing that twenty patients or 35 per cent of our total number of carcinoma

Figure 4 presents historical data on the duration of goiter in our patients at the time surgery was carried out at this hospital. Fifty-seven per cent of our patients with goiter were between the ages

AGE OF PATIENT IN DECADES	COLLOID				NO COLLOID			
	RIGHT NECK	LEFT NECK	BILATERAL	AVERAGE DURATION IN MONTHS	RIGHT NECK	LEFT NECK	BILATERAL	AVERAGE DURATION
0-10	2	1	1	18	0	0	0	
10-20	4	0	1	40	0	0	2	21
20-30	2	0	0	72	0	1	0	10
30-40	0	2	0	42				
40-50	1	1	0	11				
50-60	0	1	0	36	0	1	0	12

Fig. 2. Lateral aberrant thyroid syndrome (twenty patients or 35 per cent).

GOITER	INCREASE IN GOITER SIZE	COMPRESSION SYMPTOMS	SIGNIFICANT WEIGHT LOSS	HOARSENESS
37 OR 100%	27 OR 75%	19 OR 55%	13 OR 36%	15 OR 42%

Fig. 3. Symptoms of thyroid cancer other than cervical lymphadenopathy (thirty-seven patients or 65 per cent).

patients treated with I¹³¹ came to us with the lateral aberrant thyroid syndrome. It is apparent from these data that in our series this syndrome occurred most commonly in young persons with colloid producing carcinoma.

Figure 3 presents the incidence of symptoms compatible with the diagnosis of thyroid cancer, other than cervical lymphadenopathy. In our series, all other patients with thyroid cancer (thirty-seven patients or 65 per cent) eventually developed a goiter. Usually the goiter had been increasing in size and compression symptoms resulted. Of special interest was the fact that a few patients with relatively few grams of thyroid carcinoma lost 10 to 20 pounds of weight without evidence that the weight loss resulted from compression of the esophagus by the carcinoma.

of fifty to eighty years and stated that they had had a goiter. Many of these patients had been advised to have a thyroidectomy fourteen to forty years before the present admission but failed to do so.

Previous Surgery.—It is evident from Figure 5 that all but one patient was subjected to at least a surgical biopsy. It is also evident that the majority of our patients had a total thyroidectomy. Radical neck dissection and total thyroidectomy are being used more commonly in our hospital for treatment of thyroid gland carcinoma because it is becoming ever more evident that even though patients may have slow growing carcinoma of the thyroid for fifteen to thirty years before they get into serious trouble, they nevertheless have carci-

noma that should be treated as energetically as carcinomas arising in other parts of the body. In addition, our surgeons understand that the patients will tend to have a more complete

AGE OF PATIENT IN DECADES	NUMBER OF PATIENTS	
0-10	1	8
10-20	0	-
20-30	5	29
30-40	4	97
40-50	5	42
50-60	3	192
60-70	14	167
70-80	3	484
80-90	1	8

Fig. 4. Duration of goiter (in months).

response to I^{131} therapy if bulky masses of carcinoma are removed. Most important, *some of the carcinoma may be well enough differentiated to concentrate I^{131} while other metastases may not concentrate I^{131} .* This fact may not become apparent until the surgeon has removed such undifferentiated metastases. It is evident from Figure 6 that using this more aggressive surgical approach, one radical neck dissection resulted in the removal of five nodes, none of which contained carcinoma. This was the only instance of a fruitless dissection and was occasioned by misinterpretation of the results of external counting with a new scintillation tube. All other radical neck dissection proved to be fruitful and consequently we believe, well worthwhile.

Previous X-ray Therapy.—Forty-seven per cent of our fifty-seven patients treated for carcinoma of the thyroid with I^{131} had had previous roentgen ray therapy. Of the remaining 53 per cent who had not had x-ray therapy, 23 per cent had such a high concentration of I^{131} in their metastases that I^{131} was deemed the treatment of choice. The metastases were judged to be too extensive to treat with roentgen therapy in 11 per cent of patients. Twelve per cent of patients were thought to be too young to justify cancericidal doses of x-ray to the cervical region, that might grossly alter skeletal development. Seven per cent of patients were given no x-ray therapy because it was unlikely that lymphatic metastases were present.

Principle Indication for I^{131} .—Sixty per cent of our patients were treated principally because I^{131} uptake studies showed sufficient concentration of I^{131} by the thyroid carcinoma to justify an attempt

	BIOPSY ONLY	SUBTOTAL THYROIDECTOMY	TOTAL THYROIDECTOMY	RADICAL NECK DISSECTION
1947	—	1	—	—
1948	4	3	1	—
1949	1	1	3	2
1950	—	3	2	—
1951	—	3	2	4
1952	0,1	5	7	5
1953	—	5	8	5
1954	—	3	7	2
	12%	42%	53%	32%

Fig. 5. Surgery before I^{131} treatment.

	SIDE DISSECTED		NUMBER OF LYMPHNODES POSITIVE/TOTAL NUMBER REMOVED
	RIGHT	LEFT	
1947	—	—	—
1948	—	—	—
1949	—	2	4/5, 5/30, 4/?
1950	—	—	1-4/? X 3 PATIENTS
1951	2	2	2-3/? X 2
1952	3	2	1-4/? X 7
1953	3	2	10/15, 1/8, 2/? X 2
1954	1	1	2/8, 0/5, 2-4/? X 2

Fig. 6. Reported results of cervical lymph node dissection.

to destroy metastases with I^{131} as the procedure of choice. Thirty-six per cent were treated principally to destroy thyroid remnant after an attempted total thyroidectomy. A word of explanation about this latter indication for I^{131} is in order here.

When the surgeon has performed what he considers to be a total thyroidectomy and yet external counting over the thyroid region still reveals concentration of I^{131} , this may be concentrated in residual normal thyroid tissue, residual functioning thyroid cancer, or a combination of cancer in normal thyroid tissue. It seems advisable to administer I^{131} here to complete the job that the surgeon started, namely, a total thyroidectomy for the removal of all normal and cancerous thyroid tissue.

Early in our studies we unfortunately treated

THYROID CARCINOMA—BEIERWALTES AND JOHNSON

4 per cent of our series of patients principally because surgeon and x-ray therapist refused treatment. This reason is no longer used as a valid indication because it accomplishes no good for

	INITIAL DOSE	TOTAL DOSE
1947	2	185
1948	20	48
1949	57	221
1950	58	147
1951	50	85
1952	84	153
1953	95	114
1954	91	103

Fig. 7. Average dose of I^{131} in millicuries.

showed counts five to ten times higher than counts over control areas. Only one patient showed counts ten to twenty times greater over metastasis than counts over control areas. This patient had a solitary metastasis to the wing of the right ilium.

Average Dose of I^{131} .—Figure 7 shows that over the years the average initial dose of I^{131} has increased from what was undoubtedly a small non-effective dose to a present average initial dose of about 100 millicuries. Average total dose as tabulated here in the right column means little since a patient's total dose, sometimes given over many years, is tabulated in the same year as his initial dose. For example, the average total dose recorded for 1949 was certainly biased by one

	24 HOURS	48 HOURS	72 HOURS	3 DAY EXCRETION
MINIMUM	33	6	2	
MAXIMUM	80	30	15	
AVERAGE	53%	17%	8%	78%

Fig. 8. Per cent of treatment dose excreted in three days.

the patient and gives a poor reputation to the use of I^{131} for the treatment of thyroid carcinoma.

Recorded Uptake of I^{131} in Metastases by External Counting.—Counts over a metastasis were compared with similarly performed counts over a comparable position on the opposite side of the body where no metastasis was present. Eleven patients, or 19 per cent, were demonstrated to have a count two to five times greater over cervical node metastases than over a similar "control" anatomy. We could demonstrate I^{131} concentration by lung metastases in only two patients out of six. The counts in these patients were only two to five times greater over metastases than over similar areas where metastases were not visualized. Three other patients with lung metastases in whom cervical node metastases were demonstrated to concentrate I^{131} but the lung metastases showed no significant uptake had marked decrease in apparent size and number of lung metastases as reported by our radiologists after I^{131} treatment. An additional fifteen patients, or 26 per cent, with cervical lymphadenopathy and one patient with metastasis to the scapula

exceptional patient started on treatment that year who is still receiving I^{131} and has received a total dosage of approximately one curie of radioiodine to date. We have seen cervical adenopathy melt away within three weeks after an initial treatment dose of 60 millicuries, and lung metastases totally disappear after two treatment doses totaling 225 millicuries. Others have reported using up to 625 millicuries in a single initial dose in adults and 300 millicuries in children without death but without demonstrable beneficial effect. We rarely give over 60 millicuries as an initial dose in children under age ten years, and rarely over 160 millicuries as an initial dose in adults.

Urinary Excretion After Treatment Dose.—Patients are hospitalized during I^{131} treatment of thyroid carcinoma only because the A.E.C. requires hospitalization¹⁴ for any patient containing more than 30 millicuries of I^{131} . We decide when the patient can be discharged from the hospital by measuring the amount of radioactive iodine collected in each twenty-four-hour urine sample and subtracting this quantity of radioactivity from the amount initially administered to

the patient, with suitable corrections for radioactive decay.

Figure 8 shows that although we observed large variations in the rate of urinary excretion of I^{131} from patient to patient, depending upon the functional capacity of the carcinoma, the average patient given 100 millicuries of I^{131} will be ready for discharge after three days. It was found necessary to carefully instruct the patient to urinate before having a bowel movement because he almost always urinates at this time in the bed pan and the physician then loses track of the quantity of I^{131} passed in this specimen of urine. The patient may then be kept in the hospital for an unnecessarily long period of time. It is important to check further on this possibility by monitoring the patient with a Juno monitor daily. In such an instance the recovered urinary excretion of I^{131} may indicate that the patient still contains much more than 30 millicuries of I^{131} , while the Juno may record a very safe level of less than 7 milliroentgens per hour immediately over the area of highest concentration of radioiodine.

Toxicity from Treatment Dose.—We observed local swelling after I^{131} for carcinoma in cervical lymph nodes remaining in the right neck after a total thyroidectomy in a ten-year-old boy. The boy developed massive swelling of the right side of the neck, extending almost continuously from mandible to clavicle. The swelling was noted about eight hours after an oral dose of 60 millicuries, and disappeared in twenty-four to thirty-six hours. It was not associated with infection, pain, tenderness, heat, leukocytosis or fever. We were glad that the boy had had a total thyroidectomy so that carcinomatous thyroid surrounding trachea had not swelled in this manner and thus obstructed his airway.

Three patients, demonstrated to have significant invasion by carcinoma into trachea, and therapeutic I^{131} concentration in carcinoma, experienced no symptoms of airway obstruction after a treatment dose was administered. Only ten patients complained of nausea and/or vomiting the morning following an afternoon treatment dose. No patients experienced symptoms of hyperthyroidism, such as occurs in the presence of an intact normal thyroid gland, and has been ascribed to the production of an irradiation thyroiditis causing necrosis of follicular walls with

resultant dumping of relatively large quantities of stored thyroid hormone into the circulation.

One patient with lung metastases who had had a total removal of left lobe of thyroid gland

B.M.R. <30%	SERUM CHOLESTEROL >300 μ g.%	PROTEIN BOUND IODINE <34 μ g.%
8 OF 30 OR	20 OF 33 OR	7 OF 9 OR
27%	61%	78%
CLINICAL PICTURE—23 OF 57 OR		40%

Fig. 9. Incidence of post-treatment hypothyroidism as judged by basal metabolic rate, serum cholesterol and protein bound iodine.

and a left radical neck dissection developed intense pain and other symptoms of thyroiditis in the region of remaining "normal" right lobe of the thyroid after a 100 millicurie treatment dose of I^{131} . The pain was not relieved by analgesics or cold compresses but was relieved by the administration of 300 mg. of cortisone per day orally. Cortisone has been administered successfully to treat acute non-suppurative thyroiditis,¹⁶ but we have found no previous report of its use in the treatment of irradiation thyroiditis.

We have observed no instance of suppression of renal function, pancytopenia, or leukemia. One patient with a large cystocele developed hematuria from an irradiation cystitis after each treatment dose of over 100 millicuries. Four patients developed mild anemia and leukopenia with white blood cell counts dropping to as low as 1500 per ml. of blood. No depression of platelet count was evident. It is noteworthy that these four patients all had myxedema at the time of observation of the blood changes and blood values returned to normal when a euthyroid state was produced by the administration of desiccated thyroid.

Post-Treatment Hypothyroidism.—Figure 9 presents figures on the results of our endeavor to determine when we had apparently destroyed all, or almost all, functioning thyroid cancer. When total destruction of thyroid function is produced with I^{131} it is frequently of such short duration when the patient returns for a check up that all

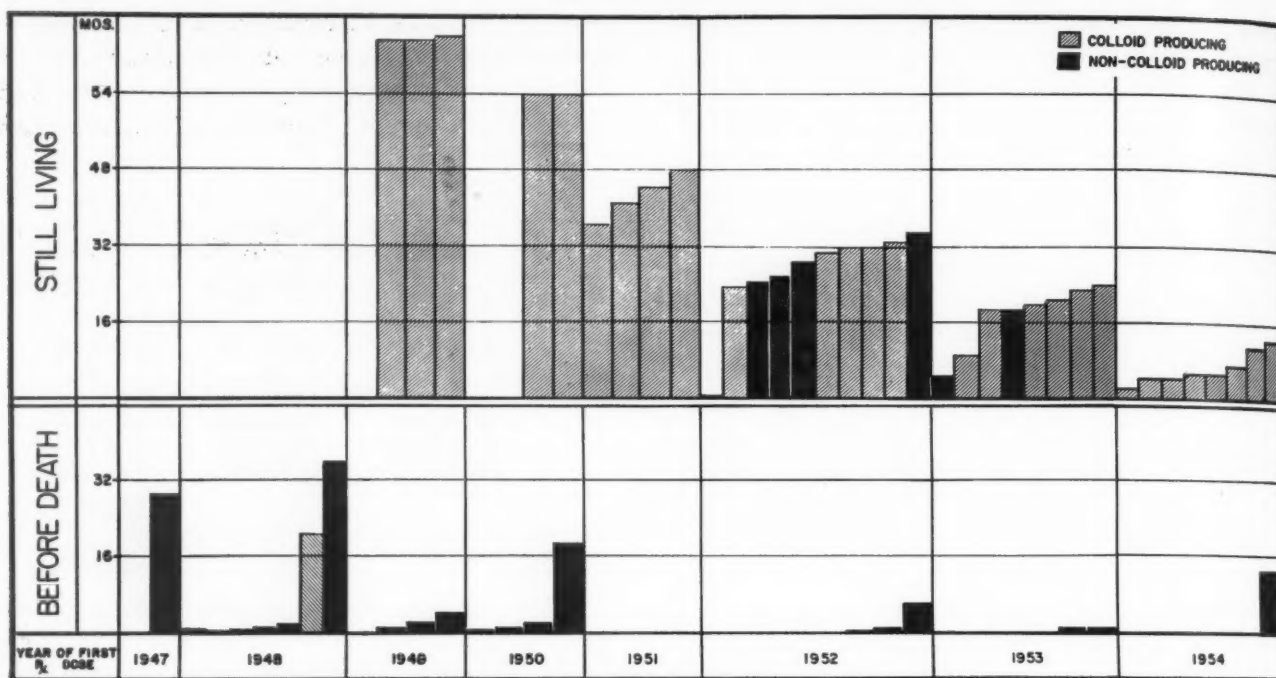


Fig. 10. Duration of known survival in months.

the classical clinical features of myxedema have not yet become manifest. Consequently, myxedema was diagnosed by history and physical examination in only 40 per cent of patients (Fig. 9). The protein-bound iodine falls promptly after the source of thyroid hormone has been destroyed, however, and so it is logical to observe that the protein-bound iodine apparently is the best index to use under these circumstances. Thyroid hormone continues to exert its effect on body cells for some time after the serum PBI falls,¹⁷ and so the basal metabolic rate and serum cholesterol were less reliable, although the serum cholesterol was more reliable than the BMR and is more generally available than the serum PBI.

Pregnancies After I^{131} Treatment.—Patients usually ask about the possible effect of a large treatment dose of I^{131} on the gonads. One of our patients inadvertently became pregnant two weeks after receiving 100 millicuries of I^{131} and delivered a normal child 9.5 months after I^{131} administration. Another woman, treated with I^{131} originally for extensive pulmonary metastases, delivered a normal child thirty-six months after the last treatment dose, and after a total dosage of 362 millicuries administered over a two-year period. She has had apparent disappearance of involved cervical lymph nodes and marked clearing of her lung fields.

Survival After Radioiodine.—Figure 10 presents for each patient an individual bar showing survival in months at the time of this review. Patients still living are placed in the upper section of the graph; deceased patients in the lower section. Patients are further grouped according to whether or not their carcinomas obviously formed colloid (cross-hatched bars) or presented no visible colloid (solid black bars). They are further grouped according to the year in which treatment with I^{131} was started. It is evident that originally we used I^{131} as a last resort in patients who were also very poor candidates for I^{131} . These patients are all dead at present. It is also evident that the surviving patients usually had carcinoma that produced colloid although apparent exception occurred. Gross has reported that colloid may be produced by a neoplasm in such fine intracellular droplets that it is not evident by conventional techniques. If I^{131} is concentrated significantly by neoplasm, it is probable that the neoplasm produced colloid even though not demonstrable by routine staining techniques.

It should be noted that survival span of our surviving patients is sharply limited by the relatively short period of time that they have been under our observation. And lastly, it should be stressed that even a twenty-year survival does not mean that the thyroid carcinoma patient is cancer-free since we have observed several patients

THYROID CARCINOMA—BEIERWALTES AND JOHNSON

who were persistently undertreated by modern standards and have been followed for fifteen to thirty years and are still working and suffering from cancer of the thyroid. Others have also reported observations on such patients.¹⁸

Deaths.—Nineteen of the original fifty-seven patients (33 per cent) are dead. We have autopsy proof that four of these fifty-seven patients died of carcinoma of the thyroid in the University Hospital. The predominant symptoms at the time

	PATIENT AGE	LOCATION OF METASTASES			AVERAGE SURVIVAL IN MONTHS
	AVERAGE IN YEARS	CERVICAL NODES	LUNGS	BONES	
PAPILLARY AND ADENOCARCINOMA	34	18	6	2	31
		23 HAD METAST. 3 HAD NONE			
PAPILLARY CYSTADENOCARCINOMA	30	9	3	1	21
		10 HAD METAST. 1 HAD NONE			
MEDULLARY	53	5	3	2	8
		6 HAD METAST. 1 HAD NONE			
HYPERNEPHROID	60	1	—	—	1
SPINDLE CELL	66	1	2	—	2
SQUAMOUS	65	2	2	1	
HÜRTLE CELL	61	—	—	1	.5
UNDIFFERENTIATED ? THYROID	50	3	1	X	2.5

Fig. 11. Pathology in relation to patient's age, location of metastases, and survival time.

When the pathologist's actual reports are correlated with patient age, location of metastases, and survival of patient (Fig. 11), it is obvious that patients in our series of selected subjects with colloid-forming carcinomas were usually diagnosed as papillary and adenocarcinoma or papillary cystadenocarcinoma, were usually under forty years of age, and to date have enjoyed the longest survival. It is possible that they show a higher per cent of metastases in cervical lymph nodes and lungs. It should be stressed that in our four autopsied patients who died of carcinoma of the thyroid, metastases were never found outside of cervical and mediastinal nodes, lungs, bones, and central nervous system. The "undifferentiated carcinoma thyroid" category at the bottom of Figure 11 refers to three patients who had metastatic carcinoma. Biopsy of thyroid revealed carcinoma in thyroid compatible with origin in thyroid but with insufficient proof that it arose from thyroid. The "x" after this heading refers to the presence of subcutaneous metastases in one such patient.

of death were due to compression or invasion of trachea, esophagus, or tributaries of the superior vena cava in fourteen patients. None of these patients had had a total thyroidectomy. Three of these patients had a classical superior vena caval syndrome. Seven suffered primarily from tracheal compression; four from dysphagia. The remaining five patients not dying primarily from compression or invasion of cervical structures died of myocardial infarction, two patients; complications of paraplegia induced by metastases to spine, one patient; cerebrovascular accident, one patient; and etiology of death unknown, one patient.

Patients Apparently Well.—Sixteen patients who were proven to have carcinoma of the thyroid with metastases that concentrated I¹³¹ are apparently well. Twelve of these patients had metastases demonstrable only in cervical nodes. Two others had metastases in cervical nodes and also bilaterally in lungs. Two also had invasion of the trachea by carcinoma demonstrated at surgery. These patients are now apparently free

of carcinoma as judged by medical history, by disappearance of cervical nodes to palpation, disappearance of lung metastases to the point that our radiologists have reported a "negative chest" on two or more films, and disappearance of concentration of I^{131} in the region of previously observed functioning metastases. The time interval since the last treatment dose in these patients ranges from one to five years, averaging three years. This experience, we think, justifies a continued attempt to treat patients with soft tissue metastases energetically in an attempt to make them entirely well rather than to merely give palliative doses of I^{131} .

All patients with demonstrated bone metastases on the other hand, continue to have progression of bone lysis, as shown by serial roentgenograms, or continue to concentrate I^{131} in bone lesions that show regrowth of bone roentgenographically. Although none of our seven patients with bone metastases are apparently free of carcinoma, we are treating a new series of such patients more energetically before giving up our hope of trying for more than just palliation even in these subjects. One such patient has been given 1,182 millicuries of I^{131} in ten doses, beginning in 1949. She has developed a persistent mild anemia and leukopenia, suggesting that perhaps the maximum total dosage of I^{131} possible in this patient is between 1 and 2 curies.*

Summary and Conclusions

Fifty-seven patients with carcinoma of the thyroid were given 3 millicuries or more of radioiodine, I^{131} for treatment of carcinoma of the thyroid from September, 1947, through December, 1954. Fifty-three per cent of this *selected* group of patients showed colloid formation in their cancer. These patients averaged thirty years in age. The remaining patients with carcinomas showing little or no obvious colloid formation averaged fifty-two years in age. Eighty-three per cent of patients with colloid forming carcinoma were under fifty years of age. Sixty-five per cent of persons showing no colloid formation in carcinoma were over fifty years of age. Thirty-five per cent of our patients noted cervical adenopathy as the first symptom of carcinoma of the thyroid. All other patients had a goiter. Fifty-seven per

cent of our patients with goiter were between the ages of fifty and eighty years and stated that they had had a goiter for fourteen to forty years. All but one of our patients was subjected to at least a surgical biopsy.

Total thyroidectomy was urged for every proven carcinoma of the thyroid to prevent death from compression or invasion of trachea, esophagus, and tributaries of the superior vena cava, to furnish adequate biopsy material, and to prepare the patient for I^{131} therapy of residual metastases. Radical neck dissection was urged when carcinoma was demonstrated in cervical lymph nodes. All feasible surgery was carried out first to insure removal of metastases that might be undiscovered because they were too undifferentiated to concentrate I^{131} . Roentgen ray therapy was used when the goiter consisted of rapidly growing undifferentiated carcinoma of the thyroid or when there was reasonable suspicion that cervical lymph node metastases were not removed surgically.

The principle indications for I^{131} therapy were an external count twenty-four hours after a tracer dose of radioiodine five to twenty times greater over the area of a metastasis than over a comparable area on the opposite side of the body where no metastasis was demonstrable, 60 per cent of patients; to destroy thyroid remnant after attempted total thyroidectomy, 36 per cent; and regretfully because surgeon and x-ray therapist had refused treatment, 4 per cent. Children under ten years of age were rarely given over 60 millicuries as an initial treatment dose; adults seldom more than 160 millicuries.

Toxic symptoms included local transient massive swelling over cervical lymph nodes in one patient, nausea and/or vomiting in ten patients, irradiation cystitis with resultant hematuria in one patient with a cystocele, mild anemia and leukopenia associated with post irradiation myxedema in four patients, and intense pain from an irradiation thyroiditis in one patient. Two patients became pregnant after treatment doses of 100 and 362 millicuries of I^{131} , respectively, and delivered normal children 9.5 months and 36 months after the last dose of I^{131} .

The majority of patients with carcinomas forming no obvious colloid are dead and the majority with colloid forming carcinomas are living and working. One-third of all patients are dead. We have autopsy proof that four of these patients died of carcinoma of the thyroid. The pre-

*Since this manuscript was submitted, two of our patients with bone metastases have returned, apparently free of metastases.

dominant symptoms at the time of death were due to compression or invasion of trachea, esophagus, or tributaries of the superior vena cava in fourteen patients. None of these patients had had a total thyroidectomy.

Sixteen patients who were proven to have carcinoma of the thyroid with metastases that concentrated I^{131} are apparently well. Twelve of these patients had metastases demonstrable only in cervical nodes. Two others had metastases in cervical nodes and also bilaterally in the lungs. None of the seven patients with bone metastases, on the other hand, shows conclusive evidence of being free of metastases even though two have shown some regrowth of bone in their lytic defects.

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SQUAMOUS CELL CARCINOMA

(Continued from Page 409)

period, no evidence of obstruction having developed.

Summary

A case is reported of development of squamous cell carcinoma in the skin around a colostomy. Although x-ray had been used sixteen years before to complete an "obstructive resection" of the bowel, the main factor in the development of the skin cancer was considered to be stasis and secondary infection. Local excision was satisfactory, but the patient died with metastasis.

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Carcinoma of the Adrenal Cortex

Discussion and Report of a Case

By Walter J. Zimmerman, M.D.
and J. A. Witter, M.D.

Highland Park, Michigan

CLINICALLY significant tumors of the adrenal cortex are uncommon, yet they are of great interest on at least two counts: first, because of the insight into normal adrenal function to be derived from the disordered functioning of the adrenal cortical tumor, and second, because of the diagnostic problems presented by the widely variable manifestations of these neoplasms.

A useful clinical classification of adrenal tumors has been presented by Cahill and Melicow.^{1*} They classify those arising from the adrenal cortex as follows:

1. Nonhormonal tumors. These give rise to no endocrinopathy but are manifest by local pain and the displacement of adjacent organs, or by distant metastasis.

2. Corticosexual (adrenogenital) syndrome. The clinical picture brought about by tumors in this group depends upon whether the hormone output is predominantly androgenic (usual) or estrogenic (unusual), and upon the age and sex of the patient. In boys an androgenic tumor gives rise to precocious puberty, whereas in girls and women the syndrome of adrenal virilism is produced. This was the situation in the case reported herein. Clinical predominance of estrogenic activity, the corticoestrogenic syndrome, is rare (although paradoxically there frequently is an abnormally high urinary excretion of estrogens associated with virilizing tumors). In males the corticoestrogenic syndrome is characterized by gynecomastia, loss of libido, and smallness of genitalia.^{2,3}

3. Corticometabolic (Cushing's) syndrome. These neoplasms elaborate a pathologic amount of the 11-17-oxygenated corticoids, hydrocortisone and cortisone, and bring about the well-known changes of Cushing's syndrome with thin, fragile,

striated skin, osteoporosis, tendency to diabetes, hypertension, centripetal fat distribution, tendency to hirsutism and amenorrhea.

4. Combined syndrome. While patients with Cushing's syndrome frequently shown signs of masculinization, patients with adrenal virilism rarely show signs of Cushing's syndrome. However an occasional case will show many symptoms of both syndromes, and to these the term "combined syndrome" has been applied.

Histology

The histologic picture in hormonally functioning tumors of the adrenal cortex may be either that of benign adenoma, or adrenal carcinoma.⁴ The latter is very malignant and metastases occur early. The adrenal and renal veins are invaded, and spread takes place both by the blood stream and the lymphatics, the organs most frequently involved being the liver, lungs and brain.

Diagnosis

The diagnosis of tumors of the adrenal gland is based upon demonstration of an abnormal tumor mass or upon detection of its hormonal function. In advanced cases the tumor may be palpable in the flank or may be suspected by downward displacement of the kidney. Pyelograms may be of additional aid in demonstrating displacement of the kidney. Perirenal or presacral air insufflation may, on occasion, be diagnostic. The hormonal effects may be recognized clinically and confirmed by laboratory study. (The well-known approach to the diagnosis of adrenal medullary tumors is beyond the scope of this report.)

Tumors producing adrenal virilism invariably give rise to an increased urinary excretion of 17-ketosteroids. Cushing's syndrome of any origin consistently is associated with an increased excretion of 17-hydroxycorticoids. However, in cases of Cushing's syndrome due to adrenal cortical carcinoma the urinary 17-ketosteroids are elevated as well, whereas adenomas are more often

From Highland Park General Hospital.

*The recently published work of Dr. Jerome W. Conn (J. Mich. State Med. Soc., 55:169-175, 1956) on primary aldosteronism requires the addition to the above classification of adrenal cortical tumors of the adenoma with pathologic elaboration of aldosterone.

CARCINOMA OF THE ADRENAL CORTEX—ZIMMERMAN AND WITTER

associated with a normal 17-ketosteroid excretion. Increased quantities of urinary estrogens may be found in association with tumors producing clinical virilism.^{5,6}

The differentiation of adrenal cortical neoplasms from adrenal cortical hyperplasia by means of observations of the level of excretion of urinary 17-ketosteroids before and after the administration of cortisone in doses sufficient to suppress the output of pituitary corticotropin has been studied by a number of investigators recently. This work has been summarized and crystallized by Jailer and co-workers⁷ who describe a "cortisone test" for the differentiation of adrenal hyperplasia from adrenal neoplasia. Following administration of suppressive doses of cortisone a significant fall in 17-ketosteroid excretion was obtained in all patients with adrenal virilism secondary to adrenal hyperplasia but not in cases where the virilizing syndrome was caused by a functioning tumor.

In Cushing's syndrome the test cannot be relied upon as fully as in the adrenogenital syndrome, perhaps because the initial level of 17-ketosteroid excretion may not be grossly abnormal in this condition. However a significant reduction in 17-ketosteroid excretion followed administration of cortisone in most cases of Cushing's syndrome due to adrenal hyperplasia, but occurred in none of the cases due to adrenal tumor.

Report of a Case

Because of our opportunity to study extensively the steroid hormone excretion preoperatively and postoperatively, the following case of adrenal cortical carcinoma is reported in detail.

The patient, a fifty-three-year-old housewife, entered the Highland Park General Hospital January 18, 1955, with the chief complaint of pain in the right hypochondrium. The pain had first been noted in August, 1954, at which time it was very severe and associated with temperature elevation to 101°. The attack seemed typical of acute cholecystitis, and she was treated conservatively for this condition by her family physician. The acute pain subsided over a period of two weeks, only to be followed by recurrent episodes of low grade soreness and discomfort in the right upper quadrant of the abdomen.

Prior to admission, general physical examination, routine hematologic study, urinalysis, cholecystograms, barium enema, and sigmoidoscopic examination failed to reveal any specific causative lesion. However, it became apparent some three or four months after the patient's initial symptoms that there was a gradually progressive hirsutism and a lowered pitch of the voice, such that telephone callers on several occasions mistook the patient

for her husband. Upon recognition of this virilizing syndrome the patient was hospitalized for further diagnostic study.

The past history was non-contributory. On review of systems a history of recent acneiform eruption about the chest and shoulders was elicited. There had been a gradual weight loss of some 20 pounds in the past six



Fig. 1.

months. The patient had undergone menopause three years previously, and there had been no vaginal bleeding since that time. Physical examination on admission to the hospital revealed the presence of a fairly heavy growth of facial hair which the patient had found it necessary to shave in recent weeks (Fig. 1). There was also a definite increase in hair over the shoulders, arms, and abdomen. The voice was low-pitched. Deep palpation in the right upper quadrant of the abdomen elicited marked tenderness, and there was found a rounded mass which descended below the right costal margin on inspiration. Examination of the external genitalia revealed definite clitoral enlargement. The pelvic examination was negative, as was the remainder of the physical examination. The blood pressure was 140/90.

General laboratory studies including complete blood count, nonprotein nitrogen, fasting blood sugar, blood Kahn, and urinalysis resulted in normal findings. An x-ray of the chest revealed some increase in bronchovascular markings in both lungs. Skull films were negative as were barium studies of the upper and lower gastrointestinal tract. Retrograde pyelograms showed downward displacement of the right renal pelvis, suggesting a large mass at the upper pole of the right kidney. The left kidney was seen to be normal in size, shape and position. The prompt excretion of indigo carmine indicated a satisfactory function of both kidneys.

CARCINOMA OF THE ADRENAL CORTEX—ZIMMERMAN AND WITTER

TABLE I*

	Date	17 Ketosteroids** per 24 hours	Estrogen† per 24 hours
Preoperative	Jan. 23-24, 1955	169 mg.	43 mcg.
	Feb. 1-2	155 mg.	
	Feb. 2-3	149 mg.	
	Feb. 3-4	252 mg.	
Cortisone Test	Feb. 6-7	247 mg.	
	Feb. 7-8	245 mg.	
Postoperative	Mar. 9-10	137 mg.	9 mcg. 10 mcg.
	Apr. 30-May 1	91 mg.	

*The 17-ketosteroid and estrogen determinations were carried out in the endocrinology laboratory at Wayne University, College of Medicine, through the generous cooperation of Dr. Robert Leach.

**Normal twenty-four-hour urinary 17-ketosteroid excretion for adult women is 5 to 15 mg.

†Normal twenty-four-hour urinary estrogen excretion (as estradiol benzoate) for women during the years of menstruation is 0.8 to 4.5 micrograms.

A twenty-four-hour urine collection analyzed for 17-ketosteroids, by the method of Drekter et al,⁸ revealed a tremendously increased excretion of 169 mg. (normal women, 5 to 15 mg. per twenty-four hours) thus confirming the clinical impression of abnormal androgenic activity.

Diagnosis.—The combination of evidence of a tumor mass at the upper pole of the right kidney, together with clinical and laboratory indication of a virilizing endocrinopathy, suggested the presence of an adrenal cortical neoplasm, either adenoma or carcinoma. Virilizing ovarian tumor appeared to be ruled out by the negative pelvic examination and the positive findings pointing to right suprarenal pathology. Again, adrenal cortical hyperplasia might have been responsible for the adrenogenital syndrome in this case. However, the recent onset of the condition in a middle-aged woman, plus the apparent presence of a tumor argued against this possibility.

Nonetheless it was considered to be of interest to carry out the previously mentioned "cortisone test" for the differentiation of adrenal hyperplasia from adrenal cortical neoplasms. Accordingly, after a series of three twenty-four-hour control collections, the patient was given 50 mg. of cortisone acetate by mouth at six-hour intervals for three days. Starting the second day, two further twenty-four-hour collections were obtained for comparison of 17-ketosteroid excretion prior to and during cortisone administration. The results (shown in Table I) show that the excretion of 17-ketosteroids was not reduced after cortisone, thus confirming the clinical impression of tumor, rather than cortical hyperplasia.

Urinary estrogens, determined according to the method described by Maddock and Nelson,⁹ revealed an extremely high level of estrogen excretion as indicated in Table I.

Surgical Treatment.—The diagnosis of right adrenal tumor thus seemed to have been established and the surgical exploration was decided upon. Anesthesia consisted of pentothal with curare supplemented by endotracheal nitrous oxide and oxygen. The patient was placed in a modified left lateral position. An incision was made over the eleventh intercostal space, extending

well anteriorly. The eleventh and twelfth ribs were resected. Upon division of Gerota's fascia a large, soft, mottled tumor was immediately apparent. Many dilated veins of large size coursed across its surface. In order to gain adequate exposure the diaphragm was incised and the pleural cavity was opened widely. The tumor

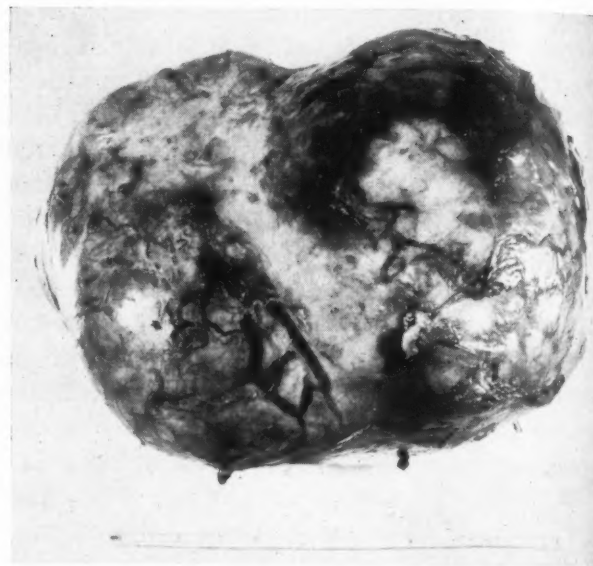


Fig. 2.

was freed by blunt dissection without great difficulty, ligating large veins as encountered. The kidney was displaced downward and was not involved by the tumor. By careful manipulation the tumor was delivered through the wound. The adrenal vein which emptied into the inferior vena cava was huge and when transected appeared to contain tumor embolus. After delivery of the tumor, careful hemostasis was carried out, the diaphragm was repaired, a thoracostomy tube was inserted through the ninth interspace, and two cigarette drains were placed in the adrenal bed. The wound was closed with interrupted silk technique and the patient was returned to her room in good condition.

Pathology.—The tumor (Fig. 2) removed at operation was large, round and encapsulated, about the size and shape of a small grapefruit, measuring 17 by 12 by 12 cm. The cut surface presented a mottled yellowish-gray appearance with areas of necrosis and hemorrhage.

On microscopic examination the tumor was seen to be composed of proliferating neoplastic cells exhibiting marked pleomorphism and large, hyperchromatic nuclei. Multinucleated cells and cells showing active mitoses were present.

The pathologic diagnosis was carcinoma of the adrenal cortex.

Course.—The immediate postoperative course was uneventful; there was no tendency to hypotension, and fluid and electrolyte balance was maintained without difficulty. (The good operative risk in cases of adrenal virilism as contrasted with the poorer risk in cases pre-

(Continued on Page 432)

Calhoun County Medical Society Central Cancer Registry

A Statistical Analysis

By James W. Hubly, M.D., M.S. (in Surg.)

Battle Creek, Michigan

and B. Aubrey Schneider, Sc.D.

New York, New York

THE Central Cancer Registry of the Calhoun County (Michigan) Medical Society was established with the aid of the American Cancer Society in March, 1950. The collection of informa-

the data on cancer reported from major medical centers. Since most cancer is treated at a community level this statistical analysis should be significant.

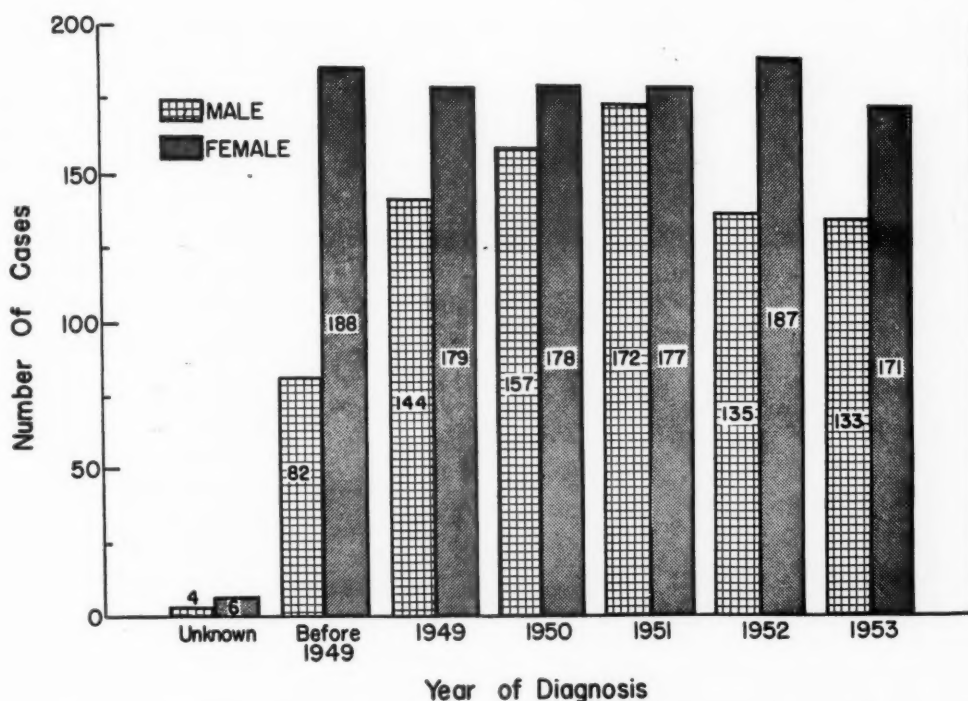


Fig. 1. Cancer cases by year of diagnosis and sex. Calhoun County, registered as of December 31, 1953.

tion on cancer illness in Calhoun County was made retroactive to January, 1949. There has been continuous recording of accessions since then. The operation of the Registry has been previously described¹ and need not be repeated here. This report is made to establish a "yardstick" for the measurement of the cancer control problem at a community level and to allow comparison with

Statistical Analysis

The over-all accomplishment of the registry in terms of annual volume of cases filed, by sex, is presented graphically in Figure 1. Since no planned effort was made to register cases diagnosed prior to 1949, and since the cases reported as diagnosed prior to this date represent incomplete coverage for those years, only the cases known to have been diagnosed during the period 1949-1953 have been considered in the next step of the analysis (Fig. 2). Among the 1,633 cases thus registered, it was found that the 320 non-resident cases represented such a select group with respect to their distribution by sex, age, site, and

Dr. Hubly is chairman, Committee on Cancer, Calhoun County Medical Society; Member Board, Michigan Division, American Cancer Society.

Dr. Schneider is assistant director, Statistical Research Section, Medical and Scientific Department, American Cancer Society, 521 West 57 Street, New York 19, New York.

CALHOUN COUNTY CANCER REGISTRY—HUBLY AND SCHNEIDER

stage of disease, that they could not be included in the general analysis. Then, too, the development of incidence rates for the county could be based on only resident cases; hence, the remainder

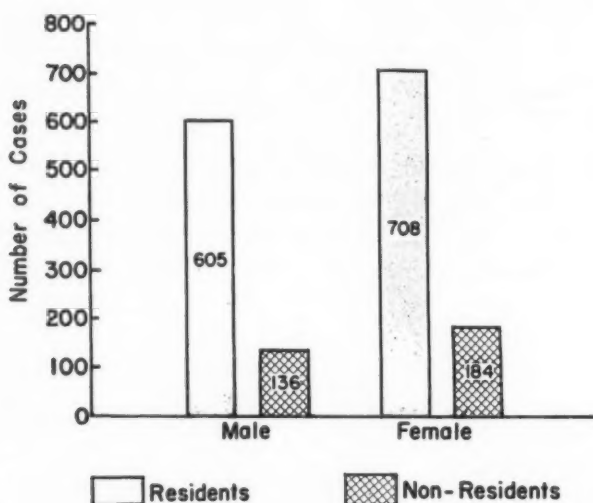


Fig. 2. Cancer cases by residence and sex. Calhoun County, 1949-1953.

of this analysis is concerned largely with the 1,313 resident cancer cases diagnosed in Calhoun County during the five-year period, 1949-1953.

These 1,313 cases are categorized by sex and site of disease in Figures 3 and 4. The annual crude incidence rate for all sites of cancer among males in the county was found to be 189 per 100,000 population; for females, 236; and for the sexes combined, 212.* These incidence rates appear low as compared with those from other areas of the United States (Fig. 5). Of course the incidence figures for Detroit,² Pittsburgh,³ and Chicago,⁴ are related to totally urban populations, and since it is apparent from national mortality statistics that cancer death rates are somewhat higher in urban than in rural areas, it may be supposed that incidence rates for urban populations are also higher than those for more rural areas. Hence, the incidence rates may be expected to be higher in the three above mentioned urban areas than in the more rural area represented by Calhoun County. However, the incidence rates for Connecticut⁵ (78 per cent urban) and for New York State exclusive of New York City⁶ (69 per cent urban) are also higher than for Calhoun County (68 per cent urban). Since the Connecti-

*Detailed incidence rates by sex, age and site of cancer, as well as other detailed tabular materials for this study, may be obtained from the author(s).

cut and New York State figures have been developed from reporting systems which have been in operation since 1936 and 1940, respectively, the differences noted may be due simply to more

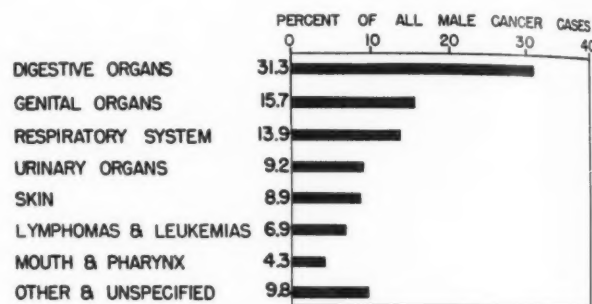


Fig. 3. Resident cases of cancer among males, by site. Calhoun County, 1949-1953.

complete reporting in the latter areas as a result of longer experience in reporting. At any rate, the differences do not appear to be accounted for so much by disproportionate representations of the various sites of cancer as by differences in the age specific rates. The cancer incidence rates are simply higher, age group by age group, in Connecticut and New York State than they are in Calhoun County.

In spite of the aforementioned differences and apparent low incidence rates in Calhoun County, there is reason to believe that these rates may well represent the true cancer morbidity as it actually exists in the county. Evidence for this observation is found in the fact that the ratios between incidence and prevalence rates, and between incidence and mortality rates in Calhoun County compare favorably with those found in other areas of the United States where cancer morbidity has been intensively studied.

One measure of the quality of medical care for cancer patients in any community is the proportion of cases treated on the basis of microscopic confirmation of the disease. That this factor can be improved, as a result of continuous study and efforts aimed at improvement, is amply attested graphically by Figure 6. Figure 7 presents the level of diagnosis by site of disease and points up the specific areas upon which future efforts toward further improvements can be focused.

The relative need or success of a public cancer education program in a community can be measured by the proportion of cancer cases seeking medical care before their disease has advanced to

CALHOUN COUNTY CANCER REGISTRY—HUBLY AND SCHNEIDER

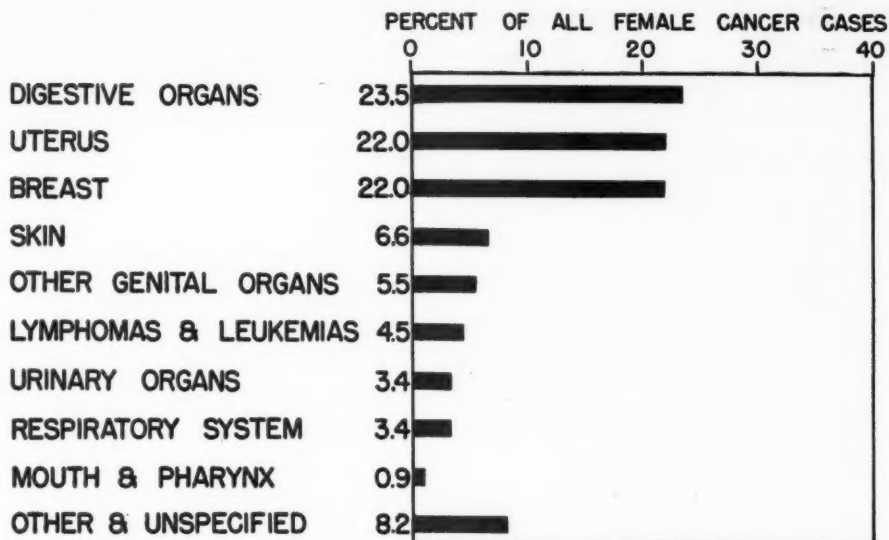


Fig. 4. Resident cases of cancer among females, by site. Calhoun County, 1949-1953.

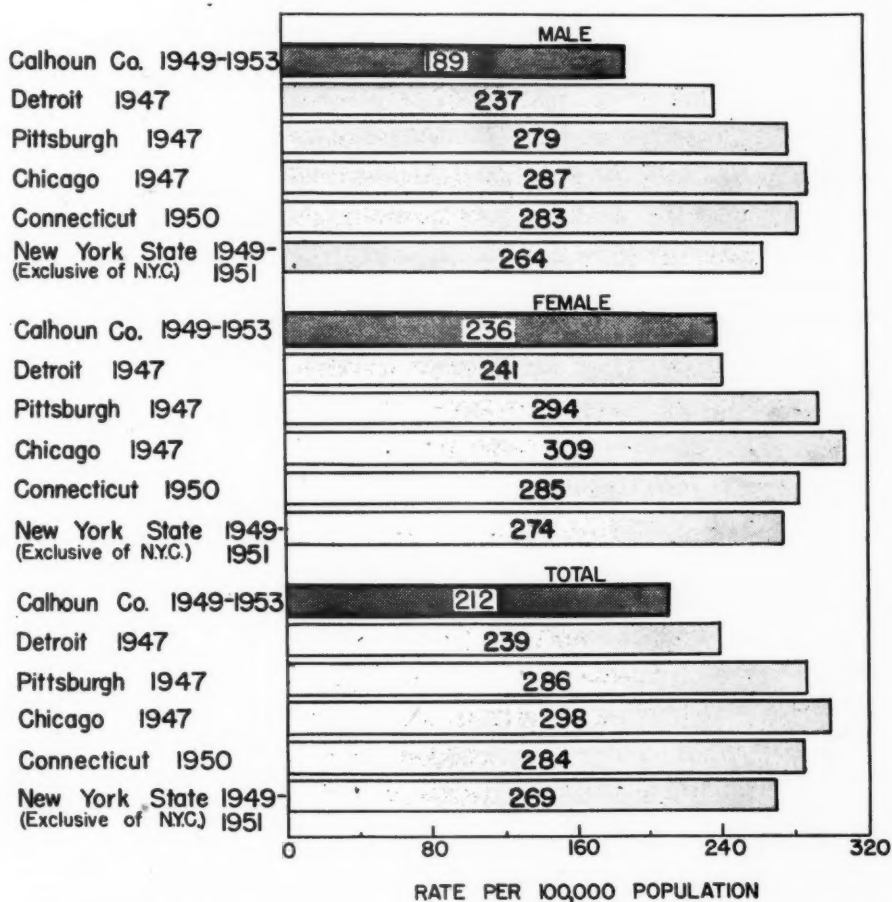


Fig. 5. Annual incidence rates for cancer in Calhoun County as compared with those for other geographic areas.

an incurable stage. Information pertinent to this consideration is presented in Figure 8. Although the group of cases with localized disease at the time of diagnosis showed an increase of 16 per-

centage points over the five-year period covered in this study, in all fairness it must be noted that 14 of these percentage points were gained through a decrease in the category "stage not specified."

CALHOUN COUNTY CANCER REGISTRY—HUBLY AND SCHNEIDER

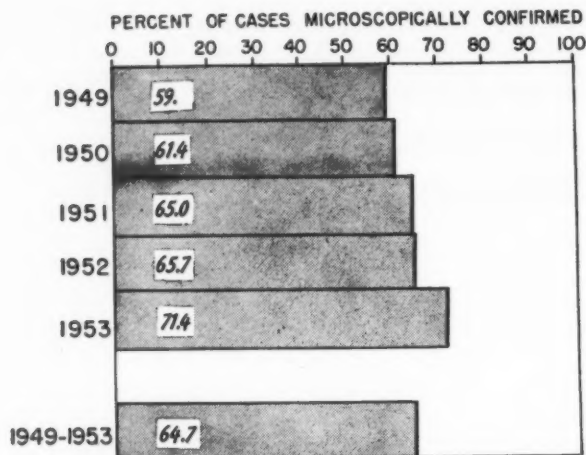


Fig. 6. Per cent of cancer cases microscopically confirmed, by year of diagnosis. Calhoun County residents, 1949-1953.

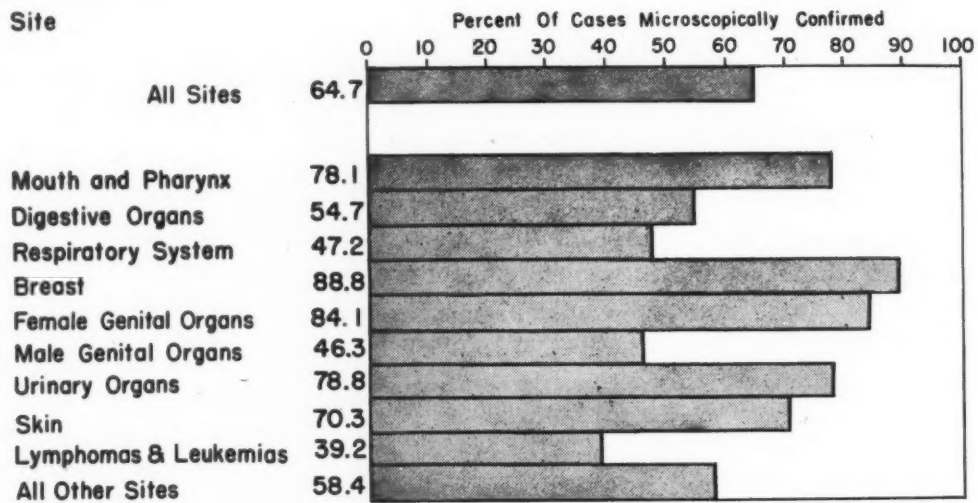


Fig. 7. Per cent of cancer cases microscopically confirmed, by site. Calhoun County residents, 1949-1953.

The delineation of this problem, by site, as depicted in Figure 9, again emphasizes the areas in which future programs in public education might well be concentrated.

The characteristic increase in the incidence rate of cancer with increasing age is demonstrated for this series of cases in Figure 10. It is also noted that, except for the youngest age group (age naught to fourteen, where the male rate is slightly higher than that for the females), the female rates are higher than those for the males at each ten-year age period up to age fifty-five to sixty-four, and beyond this period the male rates are higher than those for the females. The average age at onset of the disease is nearly five and a half years higher for males (63.6 years) than for females (58.2 years).

The hospital experience of the cancer cases covered in this study is presented in Figures 11 and 12. Since hospitalization cannot be considered complete except for the deceased cases, the data are presented separately for deceased and living cases. The proportions of these two groups of cases, by site of cancer, known to have been hospitalized for their disease are shown graphically in Figure 11. The proportion of all cases (both living and dead) for all sites of cancer, known to have been admitted to a hospital is about 79 per cent. It will be noted that for all sites of cancer except skin and the lymphomas and leukemia, the proportion of cases known to have been hospitalized is lower for the deceased than for the living cases. Here it should be pointed out that some

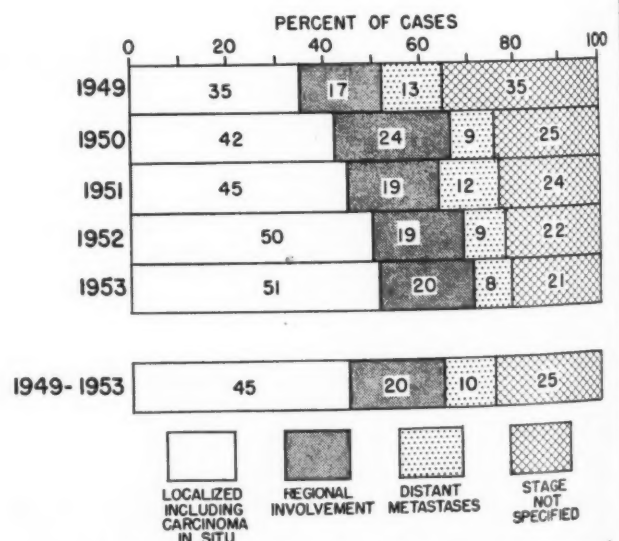


Fig. 8. Stage of cancer at time of diagnosis, by year of diagnosis. Calhoun County residents, 1949-1953.

CALHOUN COUNTY CANCER REGISTRY—HUBLY AND SCHNEIDER

of the deceased cases on file in the registry were reported by death certificate only, and in many of these cases it was impossible to determine whether or not there had ever been a hospital admission.

been hospitalized, by site, are presented in Figure 12.

Beyond all other considerations, the effectiveness of a cancer control program is best summarized

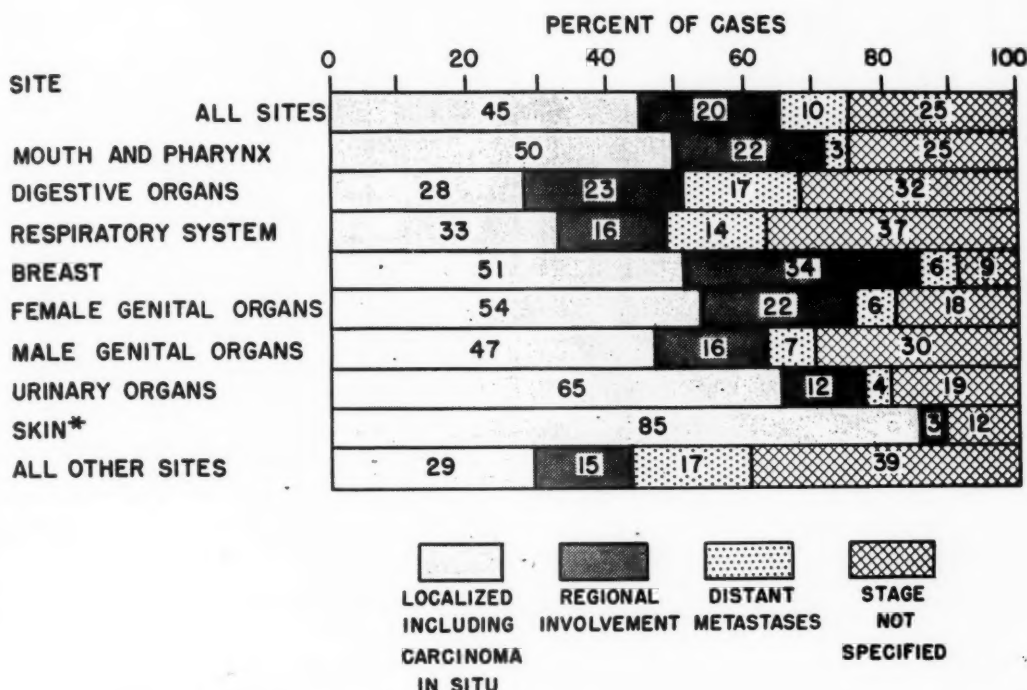


Fig. 9. Stage of cancer at time of diagnosis, by site. Calhoun County residents, 1949-1953.

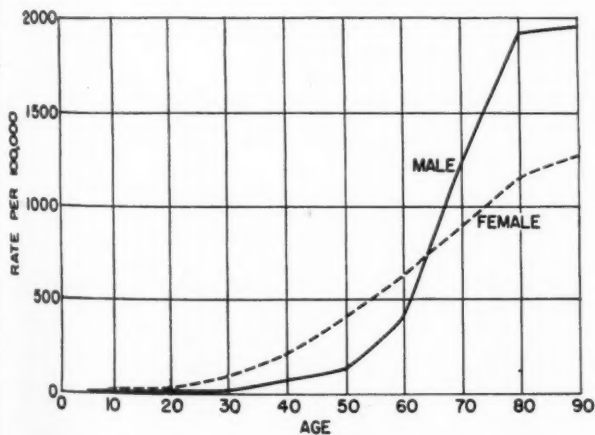


Fig. 10. Cancer incidence rates by age and sex. Residents of Calhoun County, 1949-1953.

Many of these deaths undoubtedly represent cases which would have been reported to the registry if it had been in operation over a period of ten or fifteen years previously; thus they represent a problem which will diminish as the registry grows in point of time. The average number of hospital days for deceased and living cases known to have

in the survival rates among those who have had the disease. The effect of getting more cases diagnosed while the disease is localized (when the probability of cure is highest) merges with improvements in diagnostic and therapeutic techniques to give an index of accomplishment.

Since the present analysis is concerned only with cases diagnosed and followed during the period January 1, 1949, through December 31, 1953, the maximum follow-up theoretically possible for any one case is about five and one-half years. In actual fact, considering the dates of follow-up reports, five years represent the longest period available, and there were not enough cases to warrant the computation of survival rates beyond this period.

Survivorship was computed by an actuarial method in tenths of years, using all resident cases diagnosed during the period 1949-1953 for whom there was adequate follow-up information. Adequate follow-up was obtained on 94 per cent of all resident cases. The actuarial method makes use of every case available at each time interval

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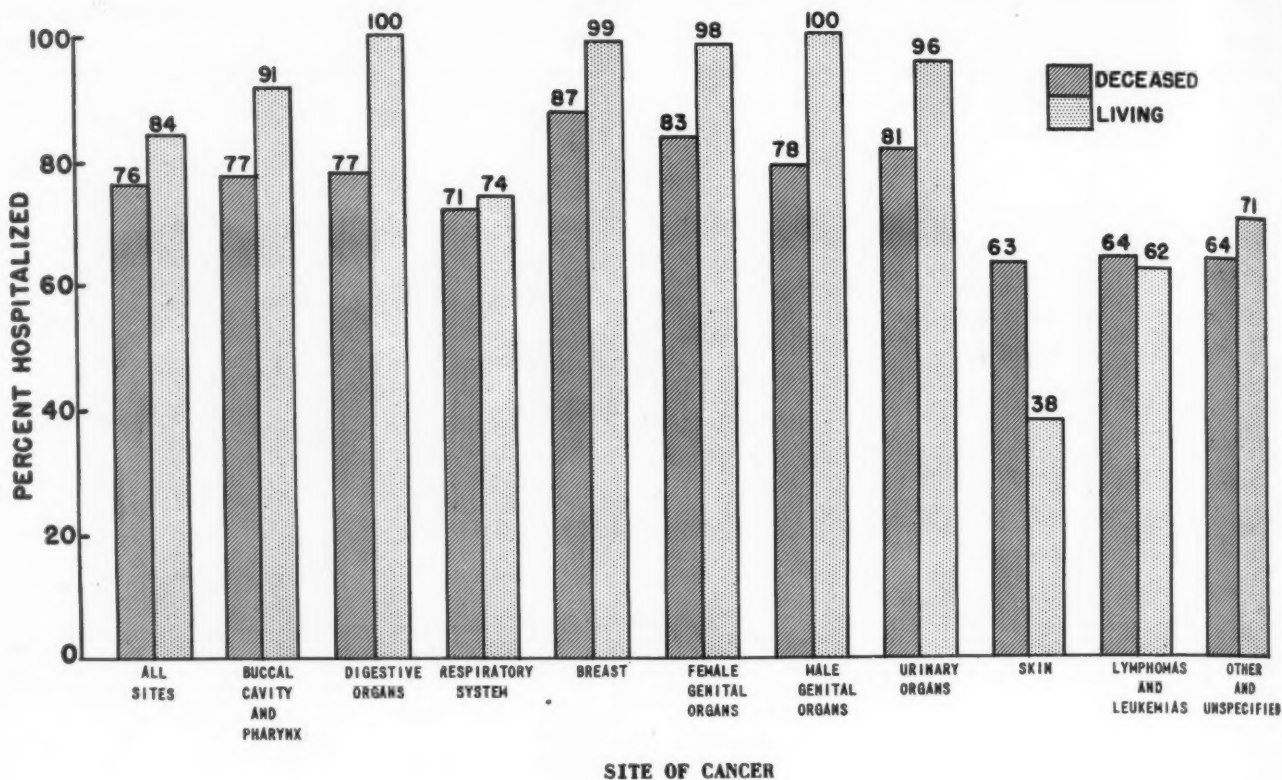


Fig. 11. Per cent of deceased and living resident cancer cases, by site, known to have been admitted to hospital. Calhoun County, 1949-1953.

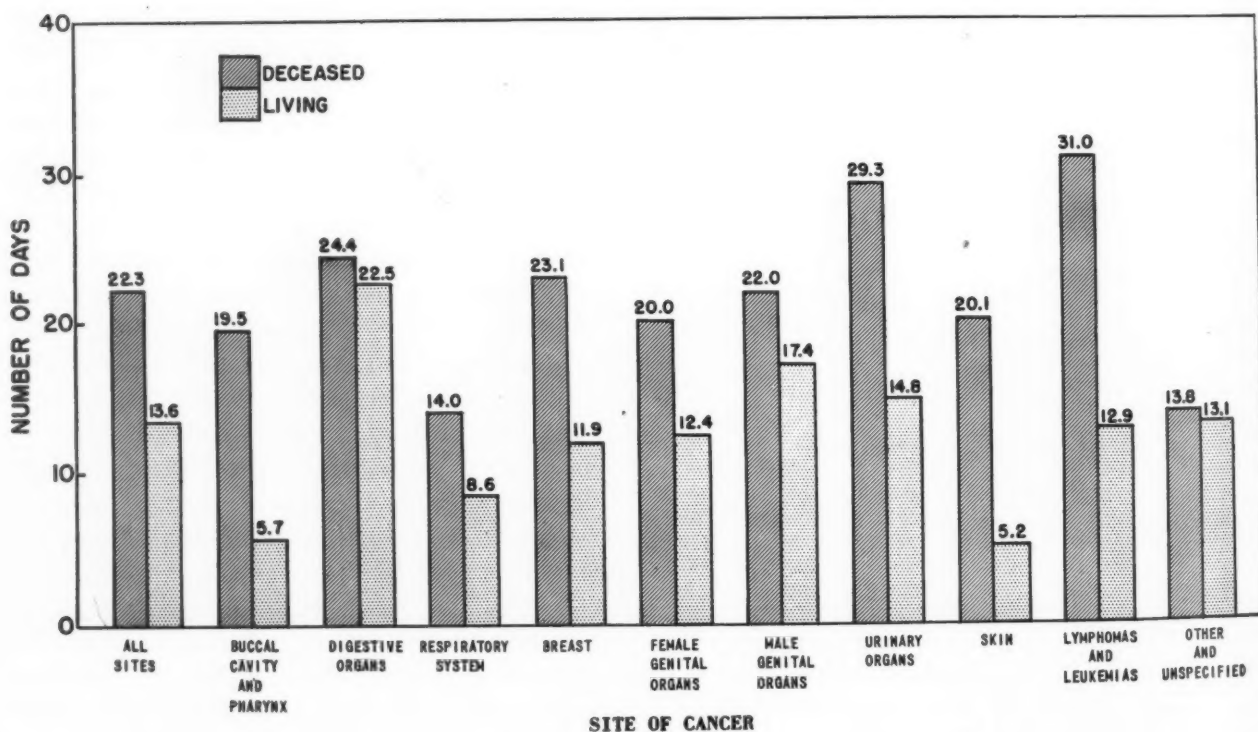


Fig. 12. Average number of hospital days for deceased and living hospitalized resident cancer cases, by site. Calhoun County, 1949-1953.

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and subject to the possibility of being either living or dead at that time. For example, for the one-half year survivorship computations, all cases who were in the study a sufficient period of time

the present circumstances.

With these reservations in mind, attention is directed to the survivorship performance of this series of patients, by sex, stage, and site of disease,

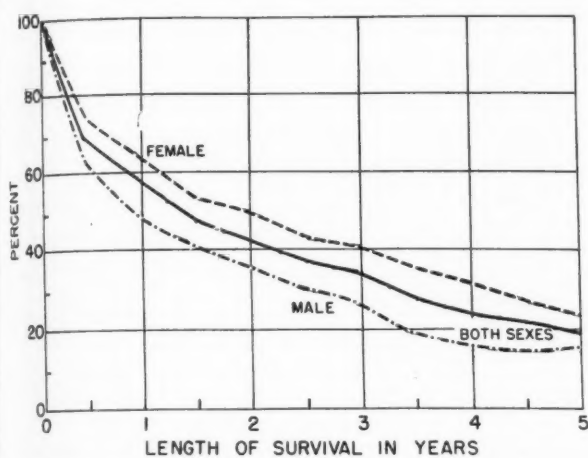


Fig. 13. Survivorship of resident cancer cases, by sex. Calhoun County, 1949-1953.

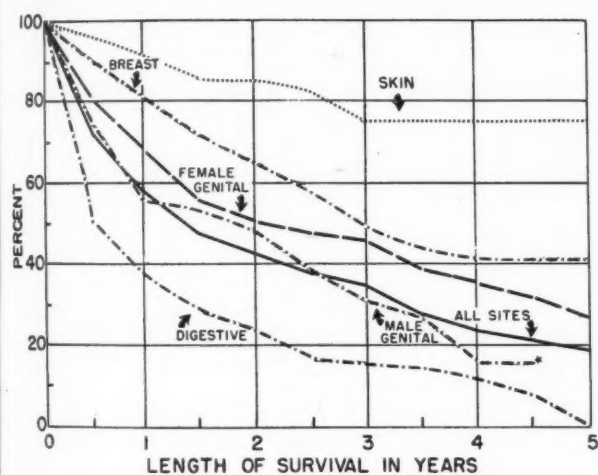


Fig. 15. Survivorship of resident cancer cases, by site. Calhoun County, 1949-1953.

to have had the opportunity of surviving six months were used, irrespective of the date of diagnosis. This means that the number of cases available for the survivorship computations at each successively higher half-year interval was smaller than that for the preceding one, with the net result that the survivorship figures become less reliable as we approach the five-year end of the time scale. After the registry has been in operation for several more years so that it includes a larger number of cases on which a full five-year follow-up can be made, the survivorship figures can be computed by a more direct method and the survivorship curves will represent a more reliable measure of accomplishment than is possible under

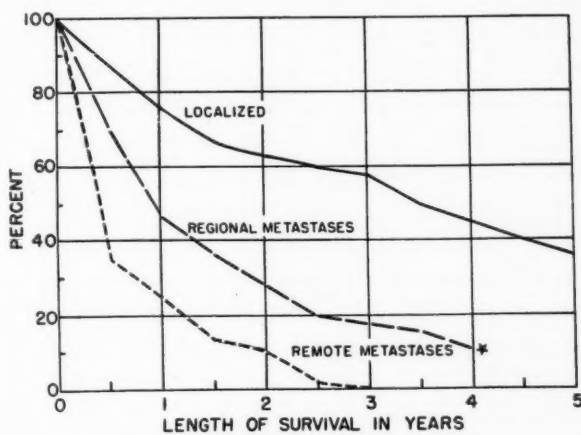


Fig. 14. Survivorship of resident cancer cases, by stage. Calhoun County, 1949-1953.

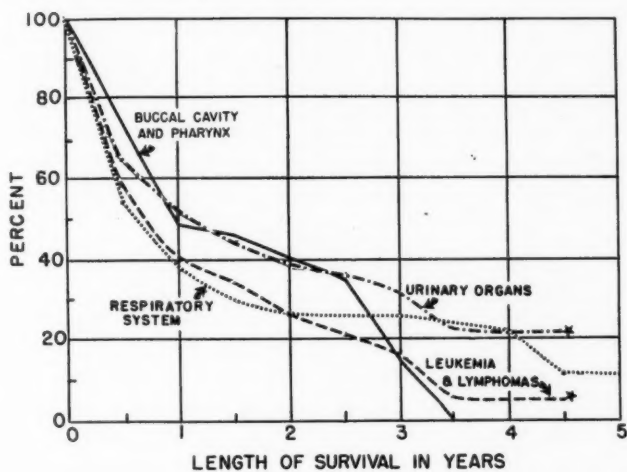


Fig. 16. Survivorship of resident cancer cases, by site. Calhoun County, 1949-1953.

as depicted in Figures 13 to 16. For the entire series, irrespective of site, stage, year of diagnosis, microscopic confirmation or treatment, 19 per cent survived five years; the figures for males and females being 16 and 23 per cent, respectively (Fig. 13). The over-all five-year survivorship figure of 19 per cent for Calhoun County may be compared with 19 per cent reported by the British Empire Cancer Campaign for 14,182 cases of primary cancer diagnosed over a period of several years prior to 1940 in several London hospitals.⁷ The over-all five-year survivorship for cancer cases diagnosed during the period 1940-1944 in Connecticut was 28 per cent.⁸ A study of time trends, to determine whether the survivorship picture in

Calhoun County is improving, cannot be attempted until the registry has been in operation for at least another five years.

The importance of stage for a favorable prognosis in cancer is strikingly indicated by the differences in survivorship according to this factor. Here, the two and one-half year period is the maximum for which survival rates for the three stages can be compared, but it will be noted (Fig. 14) that at that period, 61 per cent of Stage I cases were surviving as compared with 21 and 2 per cent, respectively, for Stage II and Stage III cases. Comparable figures for Connecticut among cases diagnosed in 1942-1946 are, for Stage I, 50 per cent; for Stage II, 31 per cent; and for Stage III, 6 per cent.

The survivorship percentages at half-year intervals up to five years are presented for the broad site categories in Figures 15 and 16. Here it will be noted that the survivorship figures vary from 75 per cent at five years for skin (exclusive of melanoma) to 0 per cent at three and one-half years for the buccal cavity and pharynx. In several site categories there were too few cases to warrant the computation of rates for the full five years.

Comment

Entering its eighth year of operation, the Central Registry now contains over 2,900 case files. Satellite registries established in the hospitals of the county in January, 1955, are beginning to function and are an aid to the collection of data by the Central Registry. Each year we feel we have improved the methods by which we gather information.

Information gathered and stored in case files is of no importance unless it is used. We feel this has been accomplished by reporting our data. Although this is the first statistical analysis to be published there have been two preliminary reports made to the membership of the Calhoun County Medical Society pointing out the areas where improvement could be made in the treatment of cancer. The main areas where we felt improvement was indicated were as follows:

1. *Diagnosis.*—The patient still does not seek the doctor soon enough. This would indicate a need for continued education of the laity. Once the patient reaches the doctor, a careful physical examination aided by the use of the various "scopes" and followed by thorough x-ray diagnostic studies is the only method that is adequate.

It appears there should be greater emphasis on x-ray diagnostic studies.

2. *Proof of Diagnosis.*—When it was shown by the preliminary report that in 1949 only 59.8 per cent of cancer cases were microscopically confirmed, greater attention to this point followed and yearly improvement occurred until in 1955 (not reported in this analysis) over 85 per cent of cancer cases were confirmed microscopically. This improvement relates directly to increased interest and action on the part of the individual physician.

3. *Choice of Treatment.*—There is today an increasing ascendancy of excisional surgery over radiation therapy. Our data does not reflect this change. For example, it was quite clear on reviewing the case files on head and neck cancer that excisional surgery was not often enough chosen as the means of definitive treatment, and too much reliance was placed on radiation therapy. A report that points this out to the doctor may influence his judgment in the selection of treatment of future cases.

4. *Follow-up.*—This is an important part in the study of cancer, and one of the hardest to accomplish. Unless the patient is observed from the time of discovery of his illness until his death occurs, proper evaluation of the treatment given cannot be made.

Now that we have established a yardstick for the measurement of the cancer control problem in Calhoun County, we hope to improve our standard of care, and to re-evaluate from time to time the data collected in the Central Registry as it matures.

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Acute Cholecystitis of Childhood

Report of a Case

By James A. Webb, M.D.

Saginaw, Michigan

ACUTE cholecystitis in children continues to be a rare surgical entity. The case reported in this paper is the only proved case on record at Saginaw General Hospital. In infancy congenital abnormality of the biliary system is a usual finding. In early childhood a recent history of upper respiratory infection may often be present.¹ Older children often have associated cholelithiasis as do adults. Why this is true is not clearly understood.

Perhaps the most thorough and comprehensive study of primary cholecystitis in children was published by Ulin in 1952.² He reviewed all reported cases up to 1948 and found a total of 475 cases. Of these he considered 326 to be proved cases. He did not accept any case reported on the basis of a non-functioning gall bladder by cholecystography, those secondary to other intra-abdominal disease, or those diagnosed solely by the gross operative finding of a distended gall bladder that would not empty. Since 1948 more than thirty cases of cholecystitis in children have been reported.³ According to Bonta,⁴ the disease has been reported less frequently during the past decade than during the decade from 1930 to 1940.

A case of proved acute cholecystitis is herewith reported in which a preoperative diagnosis of acute appendicitis was made by three physicians who examined the patient prior to surgery.

Case Report

I. M., a seven-year-old Negro boy, was admitted to Saginaw General Hospital, Saginaw, Michigan, with a six-hour history of acute abdominal pain. The patient awoke on February 5, 1955, with severe peri-umbilical pain which grew progressively worse and which gradually shifted to the right upper quadrant. The pain did not radiate to the back or the right shoulder. There was no history of past or recent jaundice. The patient vomited several times, and the vomitus contained no blood or bile. Bowel habits were regular, and the patient passed a normal brown colored stool after the onset of the abdominal pain. There was no history of urinary tract disease nor of anemia.

From the Department of Surgery, Saginaw General Hospital, Saginaw, Michigan.

APRIL, 1956

The past history was significant in that the patient had had a sore throat one week before the present illness associated with slight fever and frontal headaches. This episode had subsided on aspirin therapy alone.

There was no family history of gall-bladder disease, hemolytic disease, tuberculosis, or typhoid fever.

Physical examination revealed a colored male child who complained of acute abdominal pain out of proportion to the objective findings. The temperature was 98.6° F., the pulse rate was 108, and the respiratory rate was 24. Eyes, ears, nose and throat were normal and revealed no evidence of jaundice or dehydration. The lungs were clear to percussion and auscultation. There was marked tenderness and slight guarding in the right upper quadrant unassociated with rebound tenderness. There were no palpable organs, and the bowel sounds were minimal. Rectal examination disclosed no abnormalities.

The white blood count was 16,600 with total neutrophils 86 per cent, lymphocytes 8 per cent, monocytes 5 per cent and eosinophils 1 per cent. Urinalysis was entirely normal. Postoperatively the platelet count was 274,040, the bleeding time was 1 minute, the clotting time was 15 minutes and 34 seconds (Lee White), and there was no evidence of sickle cells.

The attending physician and the surgical consultant agreed on a diagnosis of acute appendicitis, and the patient was operated upon two hours after admission. The abdomen was entered through a Davis incision in the right lower quadrant, and clear yellow fluid was encountered in the peritoneal cavity. The appendix was located and brought into the wound with slight difficulty. The vessels were slightly prominent but the appearance was not that of acute inflammation. Palpation of the gall bladder revealed it to be markedly enlarged and very tense. The appendix was then removed and its stump was inverted. The Davis incision was closed, and the abdomen was then re-entered through a right subcostal incision. The gall bladder was seen to be thin-walled and to have a gangrenous fundus. It contained multiple areas of serosal petechial hemorrhage. The gall bladder was decompressed, and a cholecystectomy was performed. There were no stones palpable in the gall bladder, and the common bile duct was normal. The post-operative course was uneventful except that a Levine tube was necessary to control abdominal distention for twenty-four hours. The patient was discharged on the seventh postoperative day with his wounds well healed and tolerating a general diet.

Microscopic pathologic diagnosis was acute and chronic cholecystitis and normal appendix vermiformis.

Comment

Acute cholecystitis in children is an uncommon disease. The incidence of the disease is very low, but the treatment assumes great importance, especially when the diagnosis is made at the operating table. The patient in the case report presented was taken to the operating room with a preoperative diagnosis of acute appendicitis. When the peritoneum was opened, free fluid was found and the appendix had prominent vascular markings. These two findings did not explain the symptoms and the elevated white blood count. Palpatory exploration disclosed the true diagnosis.

Summary

1. A brief discussion of the incidence of acute cholecystitis in children is presented.

2. A case of proved acute cholecystitis in a seven-year-old boy is presented in detail.

3. Comments are made concerning the importance of exploratory laparotomy when the preoperative diagnosis is not unequivocally correct.

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CARCINOMA OF THE ADRENAL CORTEX

(Continued from Page 422)

presenting the Cushing's syndrome has been emphasized by Cahill and Melicow.¹ However, a chest x-ray taken ten days following operation showed early but unmistakable evidence of pulmonary metastasis.

The patient was discharged on the eleventh postoperative day, and deep x-ray therapy over the site of the tumor bed and over the lung fields was carried out on an outpatient basis. Improvement was satisfactory over a period of about six weeks although there was no remission in the manifestations of the virilism. Thereafter the patient's course was one of progressive deterioration with increasing cough, dyspnea and weight loss. She was readmitted to the hospital, May 20, 1955, in an attack of very severe dyspnea and expired two days later, fourteen weeks following the operation. Autopsy permission was not granted.

Summary

A case of adrenal cortical carcinoma is presented with a description of its clinical features, the result of extensive study of steroid excretion, and an account of its surgical management. The clinical classification and diagnosis of adrenal cortical neoplasms is discussed, and reference is made to several especially valuable papers from the literature on the subject.

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Surgical Aspects of Ulcerative Colitis

By William S. Carpenter, M.D.
Detroit, Michigan

MY remarks will concern only those ulcerative colitis patients considered medical failures, having one or more of the generally accepted indications for surgery as detailed by Dr. Cooper. The most common symptom for which we have been called upon to perform surgery has been simply chronic uncontrollable disease; we have seen fulminating disease less commonly, and questionable perforation or massive hemorrhage only on rare occasion. In every instance the internist has exhausted all medical measures, including in some cases prolonged hospitalization, steroid therapy and occasionally psychotherapy.

Severe chronic skin lesions, emaciation or advanced colon destruction leave little doubt as to the necessity for operation. The recognition that malignant degeneration occurs in 20 to 30 per cent of patients with chronic ulcerative colitis of over ten years' duration has made us more anxious to rid them of the diseased colon. One has only to see a case to realize the seriousness of this possibility. Our first such experience was a twenty-two-year-old boy who was known to have had ulcerative colitis for twelve years. I saw him shortly after he graduated from college. At that time he weighed 85 pounds, had a fever and a lower-left-quadrant mass. At operation the mass was found to be a large carcinoma of the descending colon with metastases. He was dead in less than six weeks.

Once it has been decided that medical measures are not controlling the disease, what surgical treatment is advisable for a patient with chronic ulcerative colitis? Early in our experience we hoped that an ileostomy might allow the colon to heal and continuity to be re-established later. Such has not been the case. For example, a twenty-six-year-old patient of ours had an ileostomy in 1948, and a year later her nutrition was still good. Another year later the diseased area was removed. There was no evidence of healing of the colon. Even more serious is the risk of an

asymptomatic carcinoma developing in such a defunctionalized colon.

In about 95 per cent of cases ulcerative colitis begins in the rectum and progresses proximally. We see evidence of this in patients with marked proctoscopic findings of ulcerative colitis but with a normal colon by x-ray examination. If the process continues, the proximal colon and even terminal ileum may show involvement. Thus by the time a patient has definite indications for operation the disease usually will be diffuse, and excision of the entire colon and rectum will be advisable.

At first this surgical treatment was a three-stage procedure—ileostomy followed by colectomy and later abdominoperineal resection. It was soon apparent that ileostomy and colectomy at a single stage was reasonable. This has become the usual procedure in acute as well as chronic disease. Its use in the fulminating disease has been advocated by Crile and others, who have shown that in such cases the mortality is less with colectomy than with ileostomy alone. Its value is based on the realization that the diseased colon, with consequent absorption and marked protein and blood loss, is the source of the lethal factors and that only by removing the colon can the process be quickly halted. The best results will be achieved if the patient can be operated upon early in the fulminating course. Our results have been poor with patients who have been allowed to continue in the fulminating stage for many weeks, usually with the prolonged administration of cortisone in an effort to cause a remission.

More recently we have, in selected cases, performed the entire ileostomy, colectomy and abdominoperineal resection at one operation. Such a one-stage procedure saves considerable time and hospitalization for the patient and removes the discouraging experience of recovering from one major procedure only to look forward to another.

Actually colectomy does not present much of a surgical problem. It is not a difficult procedure, and the mortality is low. Most of our difficulties

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APRIL, 1956

have been in the preparation and care of the ileostomy. Were it not for the necessity of this permanent stoma, there would be much less resistance from patient and physician alike when colectomy is advised. Early in the history of ileostomy the presence of such a stoma was a pretty unbearable situation and made the patient almost as miserable an invalid as his original colitis.

Of the ileostomy complications, which we fortunately see less frequently now, the most annoying is the skin irritation which occurs and remains as long as the ileal content comes in contact with the skin. Ulceration and actual necrosis may occur eventually. This was the usual situation before the advent of proper bags. It is easy to understand the misery this would cause as well as the inability to work or enjoy social activities. The irritated area is painful and tender. Once this has occurred, we have been able to relieve the irritation most rapidly by placing the patient face down on a frame, allowing the discharge to fall away by gravity.

Another problem has been prolapse of the ileostomy. This not only makes proper use of an ileostomy bag difficult but may cause swelling of the loop and make reduction impossible. Circulation may be compromised and resection of the prolapsed loop be necessary.

Another problem has been stenosis of the stoma with obstruction. This occurs not uncommonly early in the postoperative course and occasionally after many months of satisfactory ileostomy function. One of our patients had a total colectomy and ileostomy; after eighteen months of good ileostomy function she began to have cramps, and the ileostomy output ceased. An x-ray showed many dilated fluid-filled and gas-filled loops. It was necessary to make a new ileostomy for this patient, since which she has remained well. It is difficult to understand why this should occur so long postoperatively but we occasionally see it.

A similar and related problem is the retracted ileostomy. Here again the complication comes on many months after the ileostomy has been made and the patient is otherwise doing well. The end of the ileum, especially the mesenteric side, may retract actually below the skin level. This makes proper use of the bag impossible and may allow overgrowth of skin, causing obstruction and infection of the subcutaneous tissues. Such re-

traction usually necessitates a new ileostomy by intraperitoneal procedure.

Improved technique in preparation and methods of handling the ileostomy have reduced the incidence of complications until today it is acceptable even if not desirable. That it is preferable to colitis is shown by the uniform willingness of our surgical patients to travel to the hospital or home to express their opinion to a stranger considering colectomy. We have made this a standard practice.

We have tried various methods to control these complications. To reduce the incidence of prolapse we use a modification of the method first suggested by Cattell in which an area of the mesentery of the ileal loop forming the ileostomy is sutured to the peritoneal surface of the abdominal wall with nonabsorbable sutures.

We have gone through the trials of short ileostomy and long ileostomy, covering some with split and some with full thickness grafts, each method offering some advantage. Ileostomy revisions, usually for stenosis or partial obstruction, have been disappointingly common and numbered as many as seven in some cases. Most commonly these revisions have been done in the first few postoperative weeks. We are now using the method suggested by Turnbull, in which the serosa is removed from the distal portion of the ileum and the mucosa turned back over the end of the ileostomy and sutured to the skin. This leaves only mucosa in contact with the ileal discharges and has abolished the factor of an edematous thickened ileal serosa in causing early obstruction. It allows immediate application of a bag so that the skin is quickly and continuously protected.

While the surgeon has been interested in improving the technique of ileostomy, the patient has been primarily interested in comfort. Originally he wore pads or dressings to absorb the ileal discharge, with resultant skin irritation. There is no method to avoid irritation if the content drains on the skin. The drainage simply must be collected before it touches the skin.

The most common type of bag is the one which is cemented to the skin much as a tire patch is cemented to a tube. This protects the skin and also provides a container which can be emptied at intervals. In addition to the well-known Rutzen bag, a number of similar bags, including

ULCERATIVE COLITIS—CARPENTER

plastic disposable models, are available. More recently, bags which do not adhere to the skin but depend on pressure to prevent leakage have been devised. Fox and Brush have recently reported excellent results with such a bag. Using the Turnbull method of suturing the mucosa to the skin edge, we can now apply a temporary adherent bag before the patient leaves the operating room, and the skin is never irritated by the discharges. The bag is changed every twenty-four to forty-eight hours, and the patient can apply it himself by the fifth or sixth day.

When the difficulties have been overcome, what end-result can we expect after operation? The patient is anxious to know whether he will be able to eat as he wishes, gain weight and be active physically and socially. We recently contacted twenty-five unselected cases to evaluate the result from several standpoints a year or more after colectomy. Only one patient was uncertain as to whether he was glad he had the operation. All gained weight, ranging from 9 to 94 pounds. With the exception of a few foods which are notoriously troublesome to ileostomy patients, all ate as they wished and did not need extra meals. We have many examples of the good nutrition of these patients after colectomy.

Equally important is their economic and social adjustment to the ileostomy. We inquired into their employability. Two were unemployed before the operation and remained so afterwards.

One patient got a less strenuous job. The remainder either continued at the same occupation or changed for some reason other than the ileostomy, sometimes to a more strenuous job. Whereas almost all had lost time from work because of their colitis, the only time lost since operation was due to ileostomy revisions. The occupations for the women included medical technician, switchboard operator, bank teller, and housewife. Male occupations included policemen, welder, tool and die maker, diesel locomotive operator. A previously emaciated boy is now a field man for the Arizona game commission and is outdoors most of the time. The sports and social activities in which the patients were able to participate included dancing, swimming, fishing, horseback riding, bowling, and even water skiing. One patient said the bag interfered with any such activity.

In summary, then, we feel that in selected cases of chronic ulcerative colitis, in which medical treatment fails to control the disease, surgical intervention will effect a cure. In the majority of such cases colectomy and abdominoperineal resection will be necessary. With the exception of ileostomy complications, which are still more frequent than we would like, the technical problems have been fairly well solved. From a nutritional standpoint these patients are well. With proper handling of the ileostomy they are economically rehabilitated.

DIVIDEND OF EXTRA YEARS OF LIFE

Death is taking a partial holiday in the United States.

Death was a grimly busy agent back in 1900.

If the same death rates prevailed today, there would be:

Five times as many little caskets bearing infants under one year old; twelve times as many for babies one to five.

Four times more funerals each year for adults twenty-five to thirty-four; three times as many for men and women thirty-five to forty-four.

That is one way of expressing the huge dividend of extra years of life won since this century began. The figures come from a survey by the Health Information Foundation.

The death rate, from all causes, per 100,000 people has been chopped nearly in half, the average for all age groups. The greatest area for death's holiday is among babies, but there still are dramatic extensions of life for age groups over fifty-five.

Mortality has been cut 40 per cent among men and women forty-five to fifty-four, and 30 per cent among those fifty-five to sixty-four. It's down 20 per cent for people eighty-five and older.

Despite these gains, Americans' record of preserving health and life is still "not as good as it might be," declares George Bugbee, president of the Health Information Foundation. The foundation is a fact-finding educational organization sponsored by 200 companies in the drug, pharmaceutical, chemical and allied industries.

—B. C. Enquirer and News, February 19, 1956.

St. Luke's Hospital Clinico-Pathologic Conference

Report of a Case

Edited by Chandler Smith, M.D.
Saginaw, Michigan

THE patient was a white girl, eight years old, who was well until six weeks before entering the hospital. At that time, she unexpectedly vomited some fluid resembling bile on awakening one morning. There was no diarrhea, fever, or other indication of illness. For the next two weeks, vomiting frequently occurred after breakfast, and it gradually became apparent that there was also a moderate loss of appetite. A short time later, vomiting began to occur after all meals. The vomiting was never described as projectile. A physician was consulted, who diagnosed a "nervous stomach" and prescribed a teaspoon of medicine twice daily that made the patient drowsy but did not alleviate the vomiting. Loss of weight became apparent. Radiographic examination of the upper gastrointestinal tract revealed no abnormalities.

Ten days before entering the hospital, the patient suddenly awoke in the middle of the night, screaming with pain in both ears. The pain subsided, the child remained awake for two hours, and vomiting recurred. Sharp intermittent pain in the ears increased in frequency and severity, and examination was not revealing. On the day before admission to the hospital, the patient would stop suddenly, clasp her hands to the sides of her head, and scream with pain. That evening, while watching television, blurring of vision in the right eye was first noted. There had been moderate dizziness during the past two weeks. A weight loss of 18 pounds had occurred during the past six weeks. There had been no staggering gait, ataxia, diplopia, paralyses, paresthesias, or impairment of hearing. The patient was well orientated as to time, place, and person. The memory was unimpaired.

The temperature was 99.6 degrees (F), respirations 16, pulse 88, and blood pressure 110/70 mm. Hg. Physical examination revealed a well-developed female child who did not appear to be in any acute distress. The head was of normal configuration. The pupils were round and equal, and reactions to light and accommodation were normal. The fundi disclosed physiologic optic discs, and no petechiae or "exudates" were seen. Extraocular muscle function was intact. The external auditory canals and tympanic membranes appeared normal. The nose, mouth, and neck were not remarkable. Examination of the heart and lungs revealed no abnormalities. The abdomen was soft and nontender. The extremities were symmetrical and well formed. The deep tendon reflexes were active, equal, and physiologic. The superficial abdominal reflexes were similar. A positive Babinski reflex was not elicited.

The urine was yellow, cloudy, alkaline, and of specific gravity 1.017. The first urinalysis revealed acetone,

diacetic acid, and a reducing substance. These were not again identified and the sediment was normal on all examinations. Hematologic examination revealed 14.4 grams of hemoglobin per 100 cc. There were 5,600,000 erythrocytes and 8,300 leukocytes per cu. mm. Differential count of 100 cells revealed 55 segmented granulocytes, 2 band cells, 41 lymphocytes and 2 eosinophils. The Kahn serologic test for syphilis was negative. The fasting blood sugar was 104 mg. and the nonprotein nitrogen was 38 mg. per 100 cc. Sensitivity was tested to thirty-six pollens and 135 proteins. Seven of the former and fourteen of the latter were positive, with spinach, mustard and oyster showing the widest reactions. An electroencephalogram was interpreted as revealing a paroxysmally abnormal, grand mal type of disorder with asymmetry but no localization.

During the hospital course the patient continued to experience pain in her ears and there was occasional vomiting. On the eighth hospital day, blurring of the margins of the optic disc of the left eye was first noted. A lumbar puncture was then performed and the spinal fluid was found to be under increased pressure. The spinal fluid revealed 61 mg. of protein, 700 mg. of chloride, and 69 mg. of sugar per 100 cc. The left patellar reflex was then found to be weak, and the neurologic examination was otherwise unchanged. Later that day the child was found to be unconscious and the respiratory effort was slight. The patient existed in a respirator for the next two days and during this period, the only sign of life was a faint heart beat. The patient died after ten days in the hospital.

Clinical Discussion

Dr. R. M. Heavenrich.—This record describes an eight-year-old child who develops persistent vomiting, manifests signs of increased intracranial pressure, and dies of an illness of about seven weeks' duration. With this information alone, the diagnosis may be approached in a speculative way according to the statistics regarding the causes of death in children. It is known that about 40 per cent of deaths in children are the result of injuries. In some 10 to 12 per cent, death is due to malignant tumors. Before the age of four years these are often of renal origin or of congenital nature such as the teratomas. After four years, tumors of the eye, brain, and lymphatic system predominate. In this record there is no mention of trauma or lesions of the eye or lymph nodes. However, increased intracranial pressure is suggestive of a tumor of the brain, and in this way such a diagnosis becomes a probability. In children, brain tumors occupy the posterior cranial fossa in about two-thirds of cases. Expansion in this region gradually compresses the fourth ventricle. As this occurs, ventricular pressure rises and internal hydrocephalus becomes pronounced. The clinical signs of increased intracranial pressure include vomiting, blurring of vision, headache

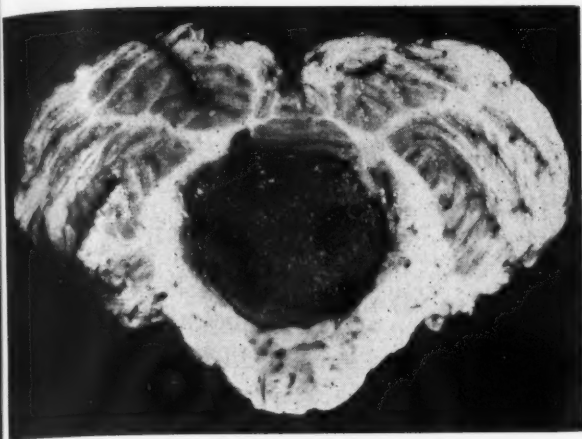


Fig. 1. Medulloblastoma of vermis cerebellum.

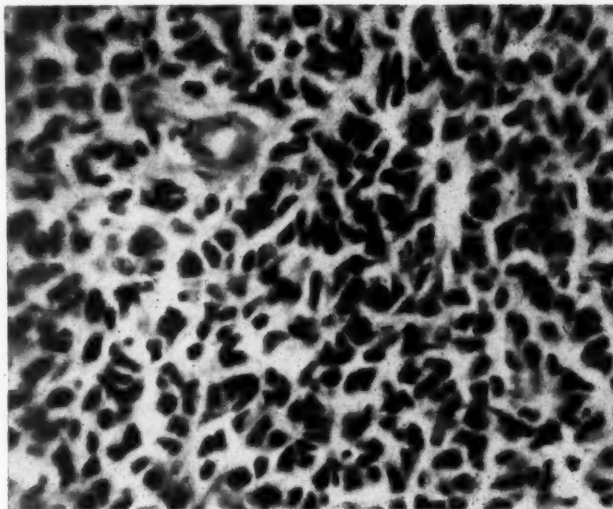


Fig. 2. Microscopic appearance of medulloblastoma.

Anatomic Diagnoses

Medulloblastoma of cerebellum.

Bronchopneumonia of right and left lungs.

Dr. J. C. Smith.—Autopsy examination revealed a medulloblastoma of the vermis of the cerebellum (Fig. 1). The fourth ventricle was occluded and moderate internal hydrocephalus was present. Histologic examination revealed the deeply basophilic nuclei and the uniformly small tumor cells characteristic of medulloblastoma (Fig. 2). Tumor cell implants were not identified either within the brain or over the external surfaces of the brain or spinal cord. Death was attributed to this tumor and to bronchopneumonia of both lungs.

In a study of 427 cases of brain tumors in children, Craig, Keith and Kernohan¹ found that 65.8 per cent were located in the posterior cranial fossa below the cerebellar tent. Of these, the distribution according to type included astrocytomas, 30.3 per cent; medulloblastomas, 24.9 per cent; and ependymomas, 12.5 per cent. Astrocytomas arise in one lateral cerebellar hemisphere, enlarge slowly, produce asymmetric ataxia, and are amenable to cure by surgical resection. Medulloblastomas arise in the midline cerebellar vermis, enlarge rapidly, cause symmetrical ataxia, and are incurable. However, the medulloblastoma is amenable to radiation therapy. Death usually occurs in twelve to fourteen months after the onset. Diagnosis may be secured by the identification of tumor cells in the centrifuged sediment of the spinal fluid. Ependymomas occur most often in young adults, and only about half of these tumors arise in the posterior fossa. In a series of 126 ependymomas, Craig, Keith, and Kernohan¹ found seventy-five to arise in the posterior fossa, and all but eight of these arose from the roof of the fourth ventricle in the midline. Because of this location, the clinical manifestations are principally those of internal hydrocephalus, rather than those of cerebellar dysfunction. In this way, the site of origin, rate of enlargement and involvement of adjacent structures are reflected in clinical patterns that permit accuracy of diagnosis.

Reference

1. Kernohan, J. W., and Sayre, G. P.: Atlas of Tumor Pathology, Fascicle on Tumors of the Central Nervous System. Armed Forces Institute of Pathology.

Clinical Diagnosis of Dr. Heavenrich

Astrocytoma of cerebellum.

APRIL, 1956

New Tuberculin Testing Material

Suggested Uses

By Raymond Hofstra, M.D., and
John A. Cowan, M.D.
Lansing, Michigan

THE Michigan Department of Health recently has prepared and is distributing the one-test dose material for the determination of the tuberculin reaction. This product is a dilution of Old Tuberculin, 0.1 cc. of which is equivalent to 0.00005 cc. of the U. S. Reference O.T. (approximately 1:2000) and 0.1 cc. is approximately equivalent to 0.0001 mg. PPD-S or 5 tuberculin units of PPD-S. This has been demonstrated by Furcolow to elicit reactions in most persons with active tuberculosis.¹ This dose has been found to be suitable for separating the infected from the uninfected in children as well as adults.²

When injected *intradermally*, the one-test tuberculin will result in a reaction in those persons harboring the tubercle bacilli, without any appreciable number of false reactions. Correctly used, the tuberculin test is one of the most specific and trustworthy devices in the detection of tuberculosis. With few exceptions, the test will result in a clearly defined reaction among those who have tubercle bacilli in their bodies.

The reliability of the test makes it possible to screen out those individuals who are actual or potential victims of tuberculosis. While the test does not reveal the site of the disease in the body, its activity or its extent, it achieves three important results:

1. The tuberculin test is effective in diagnosis and is necessary in the differential diagnosis of pulmonary diseases. Even though a person may have symptoms pointing toward tuberculous disease, if he has a negative reaction to this test, it is a good indication that some other condition may be causing the illness. Exceptions are seen in the early acutely ill and in the terminal case.

As previously stated, positive reaction indicates a sensitivity to the tuberculo proteins produced by the bacilli in the body. In most cases these bacilli are in a dormant state. For diagnostic purposes,

a positive reaction indicates that tuberculosis may be the underlying cause of the illness and if symptoms and findings warrant, further studies (sputa, gastric washings and x-ray) should be carried out. The diagnostic value of a positive reaction in a person who has previously been negative is increased particularly when a known case of tuberculosis has been a contact of the positive reactor.

2. The test has significant value in the epidemiology of tuberculosis. The tuberculin test is often the first step in finding previously unsuspected cases of tuberculosis, and many times serves as a productive starting point for tracing contacts and determining the source of the infection. This is particularly true in the pre-school and school child, in whom a reaction to the tuberculin test can be more easily traced to its source because of the relatively small number of people closely associated with the child. One example of this use of the test occurred in a southern Michigan county, where tuberculin testing was the first device used in an epidemiologic program which resulted in the hospitalization of sixteen persons with active tuberculosis.

3. The test is valuable as a method to obtain information on the status of tuberculosis control in any given community or area. Through wide use of the test, the relative rate of tuberculosis infection can be measured, indicating both the general trend of the infection rate and the specific age brackets or other groups in which tuberculosis is present. From the number of new positive reactors an indication can be obtained of the presence of open active cases in need of isolation and treatment. This epidemiological information also assists in selecting the population groups which need the most intensive screening.

As the incidence of tuberculosis decreases, the value of the tuberculin test increases in relation to the major uses listed previously. It is expected that the tuberculin test will always remain as a diagnostic tool—eventually the most efficient tool to measure the status of tuberculosis control.

(References on Page 444)

Dr. Hofstra is Tuberculosis Control Officer, Division of Tuberculosis and Adult Health, and Dr. Cowan is Director, Division of Tuberculosis and Adult Health, Michigan Department of Health.

Rheumatic Fever Prophylaxis

By the Rheumatic Fever Committee
Michigan State Medical Society

THE Michigan Crippled Children Commission in co-operation with the Michigan Department of Health has instituted a program of penicillin prophylaxis for the prevention of streptococcal infections in children who have previously had rheumatic fever to reduce the recurrence rate of rheumatic fever in Michigan. The effective date was January 16, 1956, and a section of the office of the Crippled Children Commission has been created with Robert E. Fisher, M.D., as medical co-ordinator.

The basic program of prophylaxis began in Michigan in 1943, when Carleton Dean, M.D., director, Michigan Crippled Children Commission, interested the commission in the establishment of a developmental program in eight contiguous counties in the Upper Peninsula with headquarters at Marquette. Sulfadiazine has been administered continuously in that area to children who have had rheumatic fever (except in fifteen to twenty selected cases who have been given Bicillin® since 1953), and those counties will not participate in the new program at the present time. This was the first large-scale attempt to carry out a prophylaxis program in a rural area, and it served as a model for other programs throughout the state and nation.

By 1950, it had become generally recognized that sulfadiazine prophylaxis of streptococcal infections was effective, safe, and economically feasible. The difficulty of maintaining close supervision of the patient, emergence of resistant strains, and failure of patients to take the medication continuously were admittedly limitations, but the large oral doses (twelve million units a month) of penicillin and many injections of procaine penicillin G with 2 per cent aluminum monostearate which were required led to the recommendation, in 1953, that sulfadiazine was the method of choice. The previous year a new repository penicillin had become available; a double salt, dibenzylethylenediamine dipencillin G, referred to as DBED in the earlier papers, and benzathine penicillin G currently. Stollerman found that measurable penicillin blood levels were present in a high percentage

of cases twenty-eight days after intramuscular injection of 1,200,000 units of Bicillin®, and he began to administer it to his patients as a prophylactic measure, and it was at this time that the small pilot study in the Upper Peninsula was begun. By late 1954, several papers had appeared substantiating the observation that 1,200,000 units of benzathine penicillin G monthly was more effective than procaine penicillin G—aluminum monostearate in decreasing the number of throat cultures containing hemolytic streptococci.

In February, 1955, the statement that rheumatic fever could be prevented was published in *Circulation*, vol 11, the basis of which was that irregular injection and inadequate physician supervision could be avoided by monthly injection of benzathine penicillin G. In view of this fact, Doctor Dean discussed the matter with the Michigan Crippled Children Commission to ascertain its views in supporting a large-scale prophylactic program, and, upon its approval, contacted the Rheumatic Fever Control Committee of the Michigan State Medical Society, and through them, The Council, Michigan State Medical Society. The program was enthusiastically approved, it being felt that the method was of sufficient merit and safety to warrant its general use. Although the literature indicates that some of the patients complain of discomfort at the site of injection lasting twenty-four to forty-eight hours, this was not observed in the pilot study, and there have been no reactions which would not have occurred after penicillin in any form.

The Michigan Department of Health immediately made arrangements to issue benzathine penicillin G for prophylactic treatment of any case reported to it as rheumatic fever, and the Crippled Children Commission offered funds from a trust to pay medical fees for its administration to children who had ever had a court order under either the Crippled or Afflicted Children's Acts. The program provides for ideal patient-physician relationship in that it is expected that most of the injections will be given in the physician's office,

(Continued on Page 450)

Editorial

OUR OBLIGATIONS TO THE CANCER PATIENT

This, the April issue of *THE JOURNAL*, is again designated as the "Cancer Number." This is done in co-ordination with the nationwide campaign of the American Cancer Society. The American Cancer Society, with the volunteers of the American Field Army, has become a potent factor in the lives of a large segment of our population. Through their publicity and educational programs, cancer has become a household word. It is now a favorite topic for luncheon meetings, for the cocktail hour, and also absorbs the energy of many women as their project for the year. Such activities produce different and sometimes strong reactions in the people so exposed. These people are our patients; therefore, these reactions are of importance to us who take care of these patients.

It is not the purpose of this editorial to impress the reader with the importance of the work of the Cancer Society, nor to increase your contribution to the Society, much as this may be needed. Rather, we would like to call your attention to certain obligations that the medical profession has towards those patients influenced by the publicity and educational programs of the American Cancer Society.

The main objective of cancer education has been early diagnosis with the implication that cure depends on this. That this implication is not always justified is not a sufficient reason for us as doctors to sabotage this point of education. Cancer detection or an examination for cancer only has not been accepted by many physicians, or, when forced on doctors by publicity, has often been done with little enthusiasm. The medical rebuttal, which is somewhat justified, has been that a good physical examination should detect cancer, diabetes, heart disease, muscular dystrophy, and any other nationally advertised disease. That this is true no one will deny, but herein lies one of our obligations to the people affected by cancer publicity. Has a good history been taken, and has a good physical examination been done? Does the patient leave the office satisfied? Unfortunately, too often the answer is "no."

One of the most embarrassing parts of speak-

ing to lay groups on cancer is the question period afterward. Repeatedly, the statement is made, "But my doctor didn't even have me take off my shirt when he did my physical examination; why was that?" Or the complaint is that no rectal or vaginal examination was done during the "complete physical examination." Actually, no graduate of a medical school needs now to be told how to take a history or do a thorough physical examination; but we evidently need to be repeatedly reminded to do it. This is one of our obligations to the public that this editorial would emphasize.

The fear of cancer has been used in cancer publicity as a means of getting the patient to the doctor. Such emphasis has been placed on this that many doctors feel that the fear of cancer is a more serious disease than cancer itself. Certainly, it is far more prevalent. It is doubtful whether the present cancer publicity could be changed on a national level to eliminate fear, and it is debatable whether that would be to the best interest of the patient. Be that as it may, we as doctors have inherited the disease "fear of cancer" to treat. This is another of our obligations to the public affected by cancer publicity that this editorial would emphasize—the treatment of fear of cancer. We are all too familiar with the female patient almost hysterical with fear of cancer who comes in to have her breasts examined as the result of Cancer Society publicity. Probably her breasts need no treatment, but she certainly does. In addition to the "good physical examination," a few minutes taken to explain the hormonal influence on the physiology of the breasts will be much better treatment than sedation. Also, we all know the patient, male or female, whose ordinary apprehension is usually easily controlled, in whom psychoneurosis has suddenly become a debilitating illness due to a recent exposure to cancer publicity. These patients are an exasperating challenge to the best doctor, as they just might have cancer! For these patients, the addition of complete gastrointestinal x-ray examination, a sigmoidoscopic examination, and appropriate laboratory studies, when properly explained, may be sufficient treatment to return the patient

Medicine's Stake in Traffic Safety

In May, 1955, Michigan State Police statisticians predicted 2,000 traffic deaths during that year. When the official count was totalled at the end of 1955, there had been 2,001 highway deaths in Michigan. The statisticians estimated there would be 60,000 personal injuries in auto accidents; the 1955 records showed 60,465. The predicted 1955 accident rate was 193,000; the actual figure showed 193,927.

The experts have been more wary about their predictions for 1956. They are not so sure of what the toll will be this year, and that is an encouraging note. It is a good thing because, for the first time in years, Michigan looks to a noticeable decrease in deaths and injuries on her highways during 1956.

The reason is that the Legislature, with the strongest kind of support from the Governor and from the citizens of Michigan—including the Michigan State Medical Society and many other organized groups, have determined to do something about the problems of highway safety. The new speed limits, the additional state policemen to enforce them, the new state subsidy for driver training in our schools, and the other measures now in force, give Michigan a fine start in establishing a truly effective traffic safety program.

This program is in its infancy, and there is still much to be done. Many features of the program—particularly those dealing with the medical and psychological aspects of highway accidents—are within the rightful interest of the medical profession, and the citizens of Michigan will look to MSMS more and more for leadership in those areas.

Among other things, MSMS had been outspokenly in favor of a statewide driver training program well in advance of the Legislature's action in establishing the state subsidy, because statistically it was almost certain that traffic deaths could be cut by at least 10 per cent within ten years by this method alone.

The MSMS Committee on Study of Prevention of Highway Accidents is spearheading the traffic safety activities of the medical profession in Michigan and we all can be proud of the work done by this group to date.

In highway safety, as in so many other fields, there is a great potential for success when organizations, private citizens, and government work together toward the solution of evident problems. The medical profession of Michigan has one of its finest opportunities for public service by providing the guidance and leadership in the state's traffic safety program in those areas where Medicine has a direct responsibility. The individual doctor of medicine can and should do his important part of the overall job.

W.B. Jones.

President, Michigan State Medical Society

President's



Message

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to a useful life. If so, such a work-up is worth the additional cost, even if not covered by our insurance plans. Our obligation to treat the fear of cancer is a very real one, both to the patient who does not have cancer and to the patient who has cancer. For the patient with cancer, we must see that adequate treatment, but not over-treatment, is used for the cancer. For the fear, a frank discussion, a realistic prognosis tempered with optimism, and the assurance to the patient that he will have continued care, make up a treatment program as important as the surgery or x-ray therapy used.

To recapitulate, we as doctors must realize that the publicity and educational programs of the American Cancer Society have had a profound influence on many of our patients. Through the fear of cancer, many patients now come to the doctor. We have the obligation to give these patients what they seek—a thorough physical examination—and when indicated, a “work-up” as we were taught to do in medical school. This is the best treatment for the fear of cancer when none can be found. When cancer is found, we have the obligation to see that the best treatment is made available for the cancer, and that, for the fear, a program of explanation and assurance of continued care is followed.

E. T. THIEME

NEEDED NATIONAL LEGISLATION

Favorable news letters have come from Washington mentioning that the Jenkins-Keogh Bill, authorizing self-employed professional men to make tax-free endowment building deductions would likely pass during this session. Lately, however, no word has come, and we are fearful the effort may be relaxing and we may again be left waiting.

Our members will remember that this bill places self-employed professional men on a slightly more favorable basis as compared to leaders in industry. Employers of executive and administrative personnel for many years have been allowed to set aside as “expense before taxes,” sums of money to establish endowments for their executives—and these items are not all small. Recently, a well-known chairman of the board of a large industry announced his retirement, on a “salary” of \$75,000 a year. He will pay taxes as he receives his allot-

ments, but his company, in establishing the sponsoring fund, has been tax free.

We have suggested for more than ten years that medical men, attorneys, dentists, self-employed professional men, be granted a similar benefit—nothing exceptional or unusual—but a small degree of equality with our friends in the business world. At first, we suggest that the government establish a new endowment bond, similar to the tax-anticipation bond of the later war years. One eligible could invest up to 15 or 20 per cent of income each year; the interest was suggested to be small until the conversion into endowment.

The advantages would be a new outlet for Government bonds, and the Government would have the use of all the invested money. A bond sales program now in evidence might be eased. The investor would be placed on a plane somewhat more equal to his contemporaries.

Jenkins-Keogh introduced a bill accomplishing a somewhat similar purpose, for which we would settle, but we fear more letters are needed by our Congressmen in Washington. We hope no feet are dragging.

MEDICAL SOCIETY DUES

According to our By-Laws, the annual dues for the medical society are payable the first of the year, and after April 1, the member is automatically suspended. We all know the rule, yet too many neglect sending that check to the county secretary. The reason for the rule? There are several: (1) quite a number of years ago representatives of the U. S. Post Office Department came to the office of the editor at that time, stating that where membership in an organization gives the membership subscription to a periodical, the Post Office had ruled that those dues must be paid before April 1, or THE JOURNAL could not be mailed.

It had been customary under the old form of the Society to pay dues at the annual meeting, which came in September. One County Medical Society, however, had always paid in December and refused to change its rule. The Post Office required all Journals going to members of that society be held in the editorial office until the dues were paid.

Conforming to the adopted rule is so easy, and avoids much extra work. This notice is given to

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all members because of a new ruling. The Roster number is now to be known as the Directory, and on account of the vast volume of work in preparing it, and the month earlier publication date, membership books are to be closed as of April 1, 1956. This notice is late and some leeway will probably be necessary, but county society officers are urged to send in all collections immediately.

We have said nothing about the amount of dues, but we have heard doctors complain about them many times. In the matter of dues, the medical profession should be thankful we are not a union. We are sure that all of our members know that county, state and AMA dues are paid to the county secretary. A discount of 1 per cent of the dues has been granted to the county secretary for the trouble of collecting. To relieve more clerical trouble, the auditors have stated that if this percentage is not retained by the county secretary when mailing his checks, it will not be returned. This action was approved by the Michigan State Medical Society Council.

NEW MEDICAL SCHOOLS FOR MICHIGAN

At the Panel of Deans held during the annual session of the Michigan State Medical Society in Grand Rapids, September 26, 1955, Dean A. C. Furstenberg of the University of Michigan School of Medicine stated that the State of Michigan would need another medical school to meet the educational requirements, and by 1975 might need a fourth. *THE JOURNAL* commented editorially in November, 1955 (page 1346) mentioning that for the last ten years ending in 1954 we had imported annually an average of 266 doctors of medicine—more than our own schools are producing. The University of Michigan is at its economic limit of approximately 200 graduates in a year. Wayne University College of Medicine is increasing in another three years to give us 75 graduates. Wayne could be enlarged much more readily to produce another fifty or even a hundred students than to attempt the enormous task of building a complete new school, and it could be done in several years' less time. After pointing out our insufficient effort *THE JOURNAL* said, "Wake up, Michigan."

Evidently, Michigan has responded. In the March number, we reported in the Medical News column the effort from Grand Rapids which asks the Board of Regents of the University of Michi-

gan to establish a school of medicine in Grand Rapids, pointing out educational facilities, undergraduate opportunities and various cultural advantages. The Regents, at their meeting February 10, authorized the President to visit Grand Rapids and study the problem.

It has been rumored that private interests are ready to advance large sums to establish a medical school in Flint in conjunction with the branch of the University now operating in Flint. The Editor has heard several times that donations are being considered to establish a medical department of the University of Detroit, the Jesuit school, as a logical and appropriate site for the third medical school in Michigan. The city of Detroit and its environs having over three million inhabitants makes Detroit especially eligible. Practically every other city of that size in the nation has from two to five medical schools.

Another applicant for consideration is the city of Lansing with two requests. On February 17, 1956, the Lansing city council adopted a resolution inviting the Board of Regents of the University of Michigan to consider Lansing as a site for a branch medical school, using the present property of the Boys' Vocational School. At about the same time, the Lansing School Board voted to petition the State Legislature to take action to obtain a branch medical school. On February 18, 1956, the State Board of Agriculture, after a meeting with six Lansing physicians, went on record as favoring the establishment of a medical school as part of the Michigan State University. President Hannah of Michigan State University points out the cost of organizing a new medical school: \$20,000,000 at the University of Washington, and \$16,000,000 at the University of Florida.

On Sunday, February 26, the *Kalamazoo Gazette* published several columns outlining the advantages of Kalamazoo as a site for a medical school. Kalamazoo already has two state hospitals and a potential Western Michigan University (Western Michigan College) and two other colleges in addition to two large hospitals. The city and state both own available land which could be used.

Now there are six projects to establish a second medical school. We believe the Survey of Higher Education on a grand scale, as suggested through the anticipated generosity of the Kellogg Foundation, should not be further delayed. The

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Ruthven report evidently did not go far enough. It would be unfortunate for six projects to work from such different directions when controlled guidance is so evidently needed.

An authoritative overall surveying committee is needed to canvass these and possibly other projects for a third medical school. Sage and just recommendations may avoid mistakes and lessen headaches.

BLUE CROSS PROBLEM

At this writing (February 27, 1956), the State is in a turmoil about the Blue Cross rate increases. The newspapers and radio are quoting and misquoting persons who might know some answers. Union leaders started the controversy by demanding an investigation at the time the rate increases were granted. The statement was made that Michigan Hospital Service had done nothing to hold down hospital expenses. Doctors were freely charged with being blameworthy because of over-utilization in several areas: (1) too many days in the hospital, (2) unnecessary or non-insured hospitalization, (3) too many and too expensive service such as unnecessary laboratory tests, or medication or treatments continued beyond need. Notwithstanding any faulty utilization in any form, one item stands out. Hospital per diem costs have gone up. Industry has met increased production costs by many means, and hospitals have attempted to do so.

One item, cost of labor, is ignored, yet more than 85 per cent of the increase in operating costs over the last five years has been salaries and wages. Hospitals are desperately competing for help. They do not and cannot equal wages paid to comparable people in industry. A further reason for increased costs is the much more frequent hospitalization habit of our people. The voluntary hospital and medical plans were established definitely to guarantee to the low income person proper hospital and medical care when catastrophic illness should strike. Hospitalized care at that time was a catastrophe for 85 per cent of our people. Bed and board and hall nursing only were promised and surgery in the hospital. The public, our subscribers, labor and others have constantly demanded more complete services which have necessarily raised costs. Patrons of hospital services must accept the inevitable. Wages and

salaries have advanced much more than hospital expenses. The same holds true for automobiles and most of the things we buy.

There has been much criticism of a profound socio-economic advancement which grew out of a prolonged period of distress. The medical profession is getting more than its share of black eyes. We believe, however, that every doctor of medicine should be scrupulously co-operative in giving our patients the best and necessary care, but avoiding any unnecessary expense.

Blue Cross is the target from every side, but some of the shots are going in our direction (Blue Shield). Great public service is being hampered. Let us be blameless as individuals.

FOR GENERAL BASIC INFORMATION

Most of our doctors know the difference between Blue Cross and Blue Shield; others, our critics and our defenders, may be in the dark.

There are two separate and distinct corporations with two sets of Boards of Directors or Trustees, and organized under two different enabling acts. Blue Cross (Michigan Hospital Service) deals only with in-hospital care. It was established by the Michigan Hospital Association in co-operation with the Michigan State Medical Society. The Board of Trustees has twenty-one representing hospitals, fourteen representing the public, and six representing the Michigan State Medical Society.

Blue Shield (Michigan Medical Service) was established and sponsored by the Michigan State Medical Society. It covers medical and surgical services, and pays directly to the doctor for services to subscribers. Its Board of Directors has twenty-two medical doctors, six representatives of the public, and six representatives of the hospitals.

NEW TUBERCULIN TESTING MATERIAL

(Continued from Page 438)

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Three-day Seminar Inspires County Societies' Leaders

The 1956 MSMS Annual County Secretaries-Public Relations Seminar in Detroit January 27-28-29, the most ambitious program of this type ever planned, was carried out with flawless precision. Experimentally, the 1956 meeting was expanded into a full-scale seminar extending over a three-day period; so successful were the results that the 1956 participants voted overwhelmingly to continue the three-day format next year.

Several varied techniques were used to present information designed to give county medical societies a boost in planning activities and operating their programs for the coming year. Beyond this change of pace in subject presentation, participants had full opportunity to absorb and digest the quantities of information and inspiration presented.

The guest speakers who conducted the discussions during the three-day seminar, including several from outside Michigan, represented an unusual array of talent.

Featured in the three days of lecture and discussion were the problems which the medical profession faces in the future, the important function of the county society in medical organization, the services available from MSMS to county societies, and the public relations activities most important currently to county societies and the medical profession.

The opening session was a panel discussion by four men outstanding in their respective fields. The second session was in the form of an actual classroom situation, including a written examination!

Perhaps the most unusual session was the "Experts at Bay" program on Saturday afternoon. This session provided face-to-face conferences with "experts" in fifteen different fields vital to medical societies and doctors of medicine. Questions asked of these "experts" were recorded, then screened and evaluated by the experts who chose the ten most challenging inquiries asked by the participants.

Prizes for asking the ten most challenging questions were presented at the final session to: M. W. Buckborough, M.D., South Haven; W. G. Gamble, M.D., Bay City; Miss Else Kolhede, Detroit; B. C. Payne, M.D., Ann Arbor; R. W. Teed, M.D., Ann Arbor; A. K. Cameron, M.D., Saginaw; W. S. Jones, M.D., Menominee; J. B. Rowe, M.D., Flint; Sydney Scher, M.D., Mt. Clemens; and C. N. Hoyt, M.D., Port Huron.

L. A. Drolett Honored

Another high point of the program was the presentation of a scroll to L. A. Drolett, M.D., of Lansing, honoring him for his 10 years as Chairman of the MSMS Legislative Committee. The award was in the form of a framed copy of the resolution adopted by the 1955 MSMS House of Delegates.

A great many registrants at the seminar expressed regret that every county medical society in Michigan was not represented.

In a letter to the MSMS Executive Office following the seminar, an officer from one smaller society called the seminar "one of the best and smoothest conferences of its kind on record." He continued:

"It makes one proud to belong to the MSMS when he can see examples of such proficiency," he went on. "Less proud am I of those who did not attend and I sincerely trust that next year we can have a representative from every county. Somehow we must let the non-attenders realize what they are missing and the obligation each county society has to attend."

The Secretary of a larger society wrote:

"The Seminar was well planned, effectively organized, and conducted with great ability—a splendid example of teamwork. I got considerable out of it and so did the President-Elect and Public Relations Chairman of our County Society. Already they are planning an orientation of all new and some old members."

From the Executive Secretary of one of the largest county societies:

"I found the entire program from beginning to end interesting and stimulating. I would be unable to suggest a single change. I particularly enjoyed the 'Experts at Bay' for it gave me an opportunity to confer with the 'experts' on matters pertinent to my county."

A representative of the Michigan State Medical Assistants Society stated:

"It was a most interesting and helpful program and should aid us in setting up our program in the future."

A County Society officer from the Upper Peninsula wrote to the Secretary of MSMS:

"This was the first time I have been able to attend this meeting. I would like you to know how much I enjoyed it. . . . Your subjects and speakers were excellent. The precision with which the entire program was carried out was almost unbelievable. I think you and everyone else connected with it deserve congratulations from all who attended. . . . I certainly plan to attend next year."

THREE-DAY SEMINAR

Two New Informational Handbooks

Of exceptional interest was the introduction of two MSMS handbooks at the seminar. One entitled "So You've Been Elected," is aimed at county society officers and is a guide for stimulating interest in society activities, smoothing out the administration of component societies, and meshing in with the programs of MSMS. The second handbook, entitled "Progress: Because Doctors Work Together," is packed with information for every member of MSMS and after its initial distribution to all members will be used as an indoctrination medium for all new members as they join MSMS.

Those who took an active part as lecturers, discussion leaders, counsellors, and session chairmen were:

Howard G. Benjamin, M.D., Grand Rapids, Chairman of County Secretaries; C. Allen Payne, M.D., Grand Rapids, Chairman, MSMS Public Relations Committee; Wm. S. Jones, M.D., Menominee, MSMS President; Louis H. Charbonneau, Detroit, Commissioner, State Bar of Michigan; Robert L. Novy, M.D., Detroit, Past President, Michigan Medical Service; Lester D. Bibler, M.D., Indianapolis, AMA Delegate from General Practice Section; Congressman August E. Johansen, Battle Creek; R. G. Van Buskirk, Chicago, Executive Secretary, AMA Committee on Legislation; Ernest B. Howard, M.D., Assistant Secretary, AMA; J. Joseph Herbert, Manistique, MSMS Legal Counsel; Hugh W. Brennenman, Lansing, MSMS Public Relations Counsel; Jackson E. Livesay, M.D., Flint, Speaker of MSMS House of Delegates; C. D. Selby, M.D., Port Huron; L. Fernald Foster, M.D., Bay City, MSMS Secretary; Wm. J. Burns, Lansing, MSMS Executive Director; D. Bruce Wiley, M.D., Utica, Chairman of The Council, MSMS; Jay C. Ketchum, M.D., Detroit, Executive Vice President, Michigan Medical Service; Arch Walls, M.D., Detroit, MSMS President-Elect; Julian P. Price, M.D., Florence, South Carolina, Trustee, American Medical Association.

Participants in the "Experts at Bay" session, under the chairmanship of W. B. Harm, M.D., Detroit, Vice Chairman of The Council, MSMS, were:

William Bromme, M.D., Detroit; Wilfrid Haughey, M.D., Battle Creek; Harry F. Becker, M.D., Detroit; Jay C. Ketchum, Detroit; Thomas C. Paton, Detroit; Dr. Foster; Robert A. Enlow, Chicago; Carl G. King, Saginaw; Lawrence A. Drolett, M.D., Lansing; Dr. Livesay; Dr. Payne; Mr. Herbert; Horace W. Porter, M.D., Jackson; Brooker L. Masters, M.D., Fremont; E. H. Wiard, Lansing; E. C. Swanson, M.D., Vassar; Donald A. Kerr, D.D.S., Ann Arbor; Dr. Walls; Allison E. Skaggs, Battle Creek; Frank J. Busch, M.D., Saginaw; Dr. Howard, and Dr. Novy.

Those who registered for the 1956 County Secretaries-PR Seminar included:

County Secretaries.—J. E. Mahan, M.D., Allegan (Allegan); Harold Kessler, M.D., Alpena (Alpena-Alcona-Presque Isle); E. L. Phelps, M.D., Hastings (Barry); L. Fernald Foster, M.D., Bay City (Bay-Arenac-Iosco); T. B. Mackie, M.D., Sault Ste. Marie (Chippewa-Mackinac); J. M. Cook, M.D., Charlotte (Eaton); J. B. Rowe, M.D., Flint (Genesee); Bernard Sweeney, M.D., Traverse City (Grand Traverse-Leelanau-Benzie); J. M. Wood, M.D., Mt. Pleasant (Gratiot-Isabella-Clare); C. F. Wible, M.D., Sebawaing (Huron); J. A. Van Loo, M.D., Belding (Ionia-Montcalm); H. W. Porter, M.D., Jackson (Jackson); E. O. Pearson, M.D., Kalamazoo (Kalamazoo); H. G. Benjamin, M.D., Grand

Rapids (Kent); J. R. Doty, M.D., Lapeer (Lapeer); C. L. Cook, M.D., Tecumseh (Lenawee); R. M. Duffy, M.D., Pinckney (Livingston); J. R. Acocks, M.D., Marquette (Marquette-Alger); J. A. White, M.D., Big Rapids (Mecosta-Osceola-Lake); L. G. Glickman, M.D., Menominee (Menominee); H. C. Tellman, M.D., Muskegon (Muskegon); J. P. Klein, M.D., Fremont (Newaygo); E. F. Crippen, M.D., Mancelona (Northern Michigan); G. N. Petroff, M.D., Pontiac (Oakland); C. D. Selby, M.D., Port Huron (St. Clair); H. C. Johnson, M.D., Paw Paw (Van Buren—Proxy for Secretary D. K. Morgan, M.D.); B. C. Payne, M.D., Ann Arbor (Washtenaw); M. R. Weed, M.D., Detroit (Wayne); and W. W. Moon, M.D., Cadillac (Wexford-Missaukee).

County Presidents.—R. E. Reagan, M.D., Benton Harbor (Berrien); W. E. Nettleman, M.D., Coldwater (Branch); T. J. Trapasso, M.D., Sault Ste. Marie (Chippewa-Mackinac); L. O. Shantz, M.D., Flint (Genesee); B. J. Graham, M.D., Alma (Gratiot-Isabella-Clare); J. M. Wellman, M.D., Lansing (Ingham); G. W. House, M.D., Greenville (Ionia-Montcalm); Don Marshall, M.D., Kalamazoo (Kalamazoo); H. R. C. Eddy, M.D., Adrian (Lenawee); Sydney Scher, M.D., Mt. Clemens (Macomb); H. J. Kerr, M.D., Muskegon (Muskegon); A. K. Cameron, M.D., Saginaw (Saginaw); and M. W. Buckborough, M.D., South Haven (Van Buren).

County Presidents-Elect.—Bert VanDerKolk, M.D., Allegan (Allegan); F. P. Husted, M.D., Bay City (Bay-Arenac-Iosco); O. J. Preston, M.D., Flint (Genesee); John E. McEnroe, M.D., Ironwood (Gogebic); L. F. Thalner, M.D., Jackson (Jackson); D. B. Hagerman, M.D., Grand Rapids (Kent); J. E. Manning, M.D., Saginaw (Saginaw); C. N. Hoyt, M.D., Port Huron (St. Clair); and L. R. Leader, M.D., Detroit (Wayne).

County Bulletin Editors.—P. K. Stevens, M.D., Flint (Genesee).

County Society Public Relations Chairmen.—J. W. Bunting, M.D., Alpena (Alpena-Alcona-Presque Isle); D. J. Pearson, M.D., Battle Creek (Calhoun); G. E. Anthony, M.D., Flint (Genesee); Robert O. Smith, M.D., Ionia (Ionia-Montcalm); C. Glen Callander, M.D., Kalamazoo (Kalamazoo); F. S. Gillett, M.D., Grand Rapids (Kent); C. A. Benz, M.D., Adrian (Lenawee); D. L. Rousseau, M.D., Mt. Clemens (Macomb); F. J. Busch, M.D., Saginaw (Saginaw); W. D. Cleland, Jr., M.D., Port Huron (St. Clair); J. M. Jacobowitz, M.D., Three Rivers (St. Joseph); F. J. Loomis, M.D., Paw Paw (Van Buren); and Dean W. Seger, M.D., Lake City (Wexford-Missaukee).

MSMS Council.—R. H. Baker, M.D., Pontiac; J. E. Livesay, M.D., Flint; K. H. Johnson, M.D., Lansing; W. S. Jones, M.D., Menominee; Arch Walls, M.D., Detroit; A. E. Schiller, M.D., Detroit; G. W. Slagle, M.D., Battle Creek; Ralph W. Shook, M.D., Kalamazoo; G. B. Saltonstall, M.D., Charlevoix; B. T. Montgomery, M.D., Sault Ste. Marie; T. P. Wickliffe, M.D., Calumet; D. Bruce Wiley, M.D., Utica; G. Thomas McKean, M.D., Detroit; W. B. Harm, M.D., Detroit; William Bromme, M.D., Detroit and Wilfrid Haughey, M.D., Battle Creek.

Executive Secretaries of County Medical Societies.—Mrs. Sara Warren, Flint; R. O. Kinsman, Grand Rapids; James Devereaux, Pontiac; Carl G. King, Saginaw; Else Kolhede, Detroit.

Woman's Auxiliary Representatives.—Mrs. A. C. Stander, Saginaw; Mrs. C. Allen Payne, Grand Rapids; Mrs. Robert Reagan, Benton Harbor; Mrs. Delbert MacGregor, Flint.

Michigan State Medical Assistants Society Representatives.—Miss Hallie Cummins, Caro; Miss Marie A. Erickson, Saginaw; Miss Doris E. Jarrad, Lansing; Miss Lorine Nuechterlein, Saginaw; Mrs. Elizabeth E. Peck, Detroit; Miss Marlouise Redman, Detroit.

THREE-DAY SEMINAR



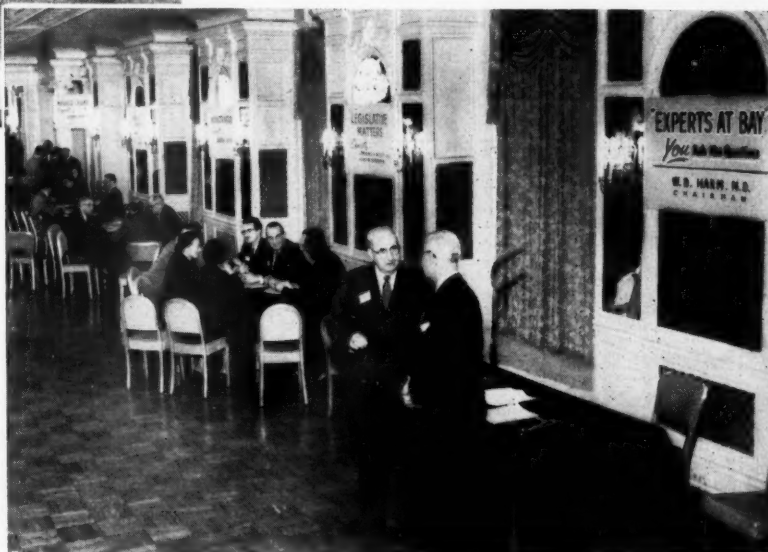
C. D. Selby, M.D., of Port Huron (right) was elected Chairman of the County Secretaries group at the closing session. The 1955 Chairman, Howard G. Benjamin, M.D., of Grand Rapids, cheerfully turned over the records and plans for next year.



L. A. Drolett, M.D., of Lansing, now serving his 11th year as MSMS Legislative Committee Chairman, was honored at the Saturday luncheon. Dr. Drolett (left) received a framed copy of an honorary resolution adopted by the 1955 House of Delegates from the hands of J. E. Livesay, M.D., Flint, Speaker of the MSMS House of Delegates.



"Experts at Bay" was the most unusual session presented at the seminar. Under the chairmanship of W. B. Harm, M.D., Detroit, Vice-Chairman of The Council, seminar participants had an opportunity for private conferences in fifteen different areas important to medical organization and medical practice. Twenty "experts" consulted with visitors at conference tables arranged for this purpose. Dr. Harm (standing second from right) is chatting with W. S. Jones, M.D., MSMS President, concerning selection of the ten most challenging questions asked at this session.



THREE-DAY SEMINAR

MSMS Public Relations Committee.—C. Allen Payne, M.D., Grand Rapids; R. W. Teed, M.D., Ann Arbor; M. W. Buckborough, M.D., South Haven; E. H. Fenton, M.D., Detroit; W. G. Gamble, Jr., M.D., Bay City; L. E. Grate, M.D., Charlevoix; A. B. Gwinn, M.D., Hastings; R. C. Kingswood, M.D., Detroit; E. C. Long, M.D., Detroit; G. E. Millard, M.D., Detroit; E. S. Oldham, M.D., Breckenridge; W. Z. Rundles, M.D., Flint; E. L. Spoehr, M.D., Ferndale; C. K. Stroup, M.D., Flint; Wayne L. Whitaker, Ph.D., Ann Arbor; and V. M. Zerbi, M.D., Ypsilanti.

Guests.—Mrs. J. R. Acocks, Marquette; Henry Alexander, Detroit; Mrs. G. E. Anthony, Flint; Harry F. Becker, M.D., Battle Creek; Lester D. Bibler, M.D., Indianapolis, Ind.; Mrs. Shirley Block, Lansing; Rudolph Bolich, Detroit; W. W. Boyles, Detroit; Russell J. Burns, Detroit; L. H. Charbonneau, LL.B., Detroit; Verne Col-

lett, Detroit; Mrs. Harold Cornelius, Grand Rapids; Mrs. James Devereaux, Pontiac; L. A. Drolett, M.D., Lansing; Robert A. Enlow, Chicago; R. F. Fenton, M.D., Detroit; L. Gordon Goodrich, Detroit; J. Joseph Herbert, J.D., Manistique; E. B. Howard, M.D., Chicago; Hon. A. E. Johansen, Battle Creek; Mrs. Harold Johnson, Paw Paw; Donald A. Kerr, D.D.S., Ann Arbor; J. C. Ketchum, Detroit; Peter E. Klein, Detroit; John Lindsey, Detroit; Mrs. F. J. Loomis, Paw Paw; B. L. Masters, M.D., Fremont; Robert Morse, Detroit; R. L. Novy, M.D., Detroit; Harry Parke, Detroit; Thomas C. Paton, Detroit; Anton Patti, Detroit; Julian P. Price, M.D., Florence, S. C.; F. P. Rhoades, M.D., Detroit; Charles Rickert, Detroit; Miss Helen Schick, Detroit; Mrs. L. O. Shantz, Flint; Allison E. Skaggs, Battle Creek; Mrs. A. E. Skaggs, Battle Creek; H. Leon Snow, Lansing; E. C. Swanson, M.D., Vassar; Melvin Temmer, Detroit; Miss Kay Topp, Detroit; R. G. Van Buskirk, LL.B., Chicago; Miss Betty Vandenbossche, Kalamazoo; John E. Verbiest, Detroit.

RECORD OF ATTENDANCE AT MSMS COUNTY SECRETARIES-PUBLIC RELATIONS SEMINAR January 27-28-29, 1956

County or District Medical Society	Pres.	Pres.- Elect.	Secy.	P.R. Chairman	Editor	MSMS Councilor	MSMS P.R. Committee	Exec. Secy.
Allegan	O	X	X	O	N	X	N	N
Alpena-Alcona-Presque Isle	O	O	X	X	N	O	XO	N
Barry	O	O	X	X	N	O	X	N
Bay-Arenac-Iosco	O	X	X	O	O	O	XX	N
Berrien	X	O	O	O	O	X	O	N
Branch	X	O	O	O	N	X	O	N
Calhoun	O	O	O	X	O	X	O	N
Cass	O	O	O	N	N	X	N	N
Chippewa-Mackinac	X	O	X	O	N	X	XX	N
Clinton	O	O	O	O	N	O	N	N
Delta-Schoolcraft	O	O	O	O	N	X	N	N
Dickinson-Iron	O	O	O	N	N	X	N	N
Eaton	O	O	X	N	N	O	N	N
Genesee	X	X	X	X	X	O	OXXX	X
Gogebic	O	X	O	X	N	X	N	N
Grand Traverse-Leelanau-Benzie	O	O	X	O	N	X	O	N
Gratiot-Isabella-Clare	X	O	X	X	N	O	X	N
Hillsdale	O	O	O	O	N	O	X	N
Houghton-Baraga-Keweenaw	O	X	O	X	O	X	X	N
Huron	O	O	O	O	N	O	O	N
Ingham	X	O	O	O	O	O	OOO	N
Ionia-Montcalm	X	O	X	X	N	O	N	N
Jackson	X	X	O	N	N	O	N	N
Kalamazoo	X	O	X	X	O	X	N	N
Kent	O	X	X	X	O	O	XXOO	X
Lapeer	O	O	X	X	N	O	N	N
Lenawee	X	O	X	O	N	O	N	N
Livingston	O	O	X	N	N	X	N	N
Luce	O	O	O	N	N	X	N	N
Macomb	X	O	O	X	N	X	N	N
Manistee	O	O	O	O	N	X	N	N
Marquette-Alger	O	O	X	O	N	X	N	N
Mason	O	O	O	N	N	O	O	N
Mecosta-Osceola-Lake	O	O	X	X	N	O	N	N
Menominee	O	O	X	X	N	X	N	N
Midland	O	O	O	N	N	X	N	N
Monroe	O	O	O	O	N	O	O	N
Muskegon	X	O	X	O	O	O	OO	N
Newaygo	O	O	X	O	N	O	N	N
North Central	O	O	O	N	N	O	O	N
Northern Michigan	O	O	X	X	N	X	X	N
Oakland	O	O	O	X	O	X	OXX	N
Oceana	O	O	O	O	N	O	N	N
Ontonagon	O	O	O	N	N	X	N	N
Ottawa	O	O	O	O	N	O	N	N
Saginaw	X	X	X	X	O	O	N	N
St. Clair	O	X	X	X	N	O	OO	N
St. Joseph	O	O	O	X	N	X	X	N
Sanilac	O	O	O	N	N	O	N	N
Shiawassee	O	O	O	O	N	O	N	N
Tuscola	O	O	O	N	N	O	N	N
Van Buren	O	O	X	X	N	X	X	N
Washtenaw	O	O	X	O	X	O	XXX	N
Wayne	O	X	X	O	O	XXXX	XXXXXX	X
Wexford-Missaukee	O	O	X	X	N	X	N	N

X = present; O = not present; N = no such officer

Others present at the seminar were:

Woman's Auxiliary representatives—four; Michigan State Medical Assistants Society representatives—six; Michigan Medical Service representatives—fourteen; Michigan Hospital Service representatives—four; Seminar speakers—thirteen; Guests—fourteen.

Mrs. Delbert N. MacGregor

President, MSMS Woman's Auxiliary, 1955-1956

For one who knows Rita MacGregor well, it would be impossible to give an impersonal recital of her many academic and educational achievements, no matter how hard the writer tried, and it is from very personal knowledge and association with Mrs. MacGregor that the author knows and admires her most.

Rita MacGregor is an amazing individual with great and many abilities, yet ability does not adequately describe the drive, force, the determination she brings to whatever task is at hand. Chat with her and one is often surprised and intrigued with the ramifications of her animated conversation, which results from her intense interest in the "so many things that make this world go round."

Thus, perhaps it is not surprising to learn that she loves music, both classical and popular, plays the piano well, and loves to dance. Such a statement, however, is a very superficial appraisal of Rita MacGregor's liking for music, for her interest in and knowledge of music is deep, extending from her childhood. She was brought up in a home stacked with complete record albums of the classics, the great singers such as Caruso, and the operas that were the favorites of her parents and a music-loving uncle. This talent was stimulated by weekly attendance at the Chicago Civic Opera with her family for many years. Going to the opera is, of course, a gala affair for many; but for young Rita MacGregor it was a seat in the second balcony with the "shoemakers" and other common people who just loved good music.

The eldest of four children, Mrs. MacGregor was born Rita Mary Biondi in Chicago. As the

eldest, incidentally, it became her responsibility later, as a faculty member at Alma College, to assist in the education of a younger sister.

A review of Rita MacGregor's education is most illuminating, because it shows a consistent eagerness and alertness in so many phases of living, learning, and knowing. After completing her early education in Chicago, she entered the School of Liberal Arts at Northwestern University. Her decision had been to major in languages with the idea of becoming a translator in the Diplomatic Service. This required much advanced study, four years of both French and Latin, and considerable study in Spanish, German, and Italian. However, there also was a requirement in science necessary for graduation, and what with her heavy schedule in languages, none of the "easy" courses was avail-

able, and she had to settle upon zoology. Science became a burning interest, and she ended up with another major in her college credits.

One who helped greatly to intensify this interest was Dr. Arch E. Cole, at present Dean of Admissions at the University of Louisville Medical School. With her new-found enthusiasm for science, Rita MacGregor by her junior year was an assistant instructor in the zoology laboratory, and during the summer session she served as laboratory instructor in comparative anatomy and cat anatomy.

Competing on a national level, Rita MacGregor's scholarship record and examinations won her a Fellowship in zoology. By the time she had closed her college career, including advanced study, she not only had a Bachelor of Arts and a Master of Science in Physiology, but she was a



member of Phi Beta Kappa and the national scientific honor society, Sigma Xi, either one of which would have been a great distinction.

With all this, there had also been time for social activities as an active member of the national sorority, Alpha Omicron Pi.

In spite of a strong inclination to enter medical school, Mrs. MacGregor's decision was to teach first. She came to Michigan as a biology instructor at Alma College, and by the middle of her first year was handling both lecture and laboratory in such pre-medical subjects as comparative anatomy and embryology. In a year, she had become Assistant Dean of Women also.

It was three years before she began to think of wider horizons. With work well started toward a Ph.D. degree at the University of Michigan, she applied—and was awarded—a Fellowship at Duke University. By this time, however, Delbert MacGregor was definitely in her future and in 1932 she started her career as a doctor's wife.

This new career included working with Dr. MacGregor in his office in Flint, a phase which ended in 1942 with the birth of their daughter, Rita Mary. As a housewife and mother, Rita MacGregor soon was able to direct her "leisure" time into many channels, much to the benefit of Flint. A long list of activities in which she has taken part includes service as a Board member of the YWCA, President of the Senior Needlework Guild, Board member of the Flint Chapter of the American Association of University Women, and active participation in the Girl Scouts, PTA, Child Study

Group, and other organizations. In the Woman's Auxiliary to the Genesee County Medical Society, she has served in many capacities including the Presidency in 1949. Under her leadership, the Genesee Auxiliary experienced a great growth and development. Prior to her current position as President of the MSMS Woman's Auxiliary, she filled the usual variety of lesser positions, and also served as Regional Chairman of Civil Defense for the National Auxiliary.

To add to the variety, at times Rita MacGregor teaches interior decorating in the adult education program of Flint's famous Mott Foundation.

Rita MacGregor is one with a talent for stimulating interest within a group, and incorporating everyone in the fold of united endeavor. She has the ability to organize with patient attention to every detail. When she addresses a group, it is with vigor and enthusiasm which stems from a sincere belief in what she is discussing. It is fascinating to watch a large audience "come to life" and listen with rapt attention when she presides over a meeting. The quickening of interest and the stirring of enthusiasm actually becomes visible.

Yet all of this efficiency and zest for doing things is carried on with a broad smile and a gay and infectious friendliness which is irresistible. Whenever anyone speaks of Rita MacGregor, it seems the comment always begins with the same words, "Oh, she is wonderful. . . ."

And she is!

EVELYN C. McLEOD

RHEUMATIC FEVER PROPHYLAXIS

(Continued from Page 439)

and frequent contact with the patient will thus be maintained. As is the case in all care under the Crippled Children Program, the parent must indicate desire for the care.

Dr. Robert E. Fisher's interest in rheumatic fever began while he was in Bay City. A graduate of Washington University School of Medicine, he was trained in medicine at Henry Ford Hospital and moved to Bay City after his military service,

where he was associated with the Jones Clinic until late 1955, at which time he opened his office in Battle Creek. He is a diplomate of the American Board of Internal Medicine and an associate of the American College of Physicians, is a member of the Rheumatic Fever Control Committee, Michigan State Medical Society, and is active in the Michigan Heart Association and the Michigan Multiple Sclerosis Society.

Jean Paul Worth

Newsman and Partner with M.D.'s in Medical Reporting

Jean Paul Worth, who received a Michigan State Medical Society award last year for doing excellent work in reporting and informing about health matters, is a man of many talents.

Author, lecturer, actor, artist, lumberman and woodsman, student, educator, he carried an ideal background into his newspaper work.

As an editor, he demands—and gets—detail, accuracy, and fairness, and the greatest of these is fairness—a fairness to his publisher, to his readers, and to his story. That's what brought him to the attention of medical men in his home town of Menominee.

Born on May 5, 1904, he graduated from Menominee High School in 1922. After a trick at lumbering and working in a shingle mill, he turned reporter on the *Menominee Herald-*

Leader for a year before going to New York where he graduated from the American Academy of Dramatic Arts. He played bit parts on the legitimate stage with such actors as Pat O'Brien, Josephine Hutchinson, and Rita Romilly.

On a vacation in his home town, he suffered a skull fracture and facial paralysis in a motor accident and gave up the theater. He returned to the *Herald-Leader* as a reporter, then moved to the *Detroit Times* as a reporter and promotional

employee. He returned to the *Herald-Leader* in 1931 as a reporter, then advanced to City Editor, Managing Editor and, in 1943, became Editor upon the death of Roger M. Andrews.

One of Worth's problems was reporting accidents and relative stories pertaining to medical men. A constant battle for detail, accuracy, and

fairness, and a constant struggle with city, county and state officers, investigators, attorneys, and medical men brought him before the Menominee County Medical Society.

Worth outlined his problem to the physicians. They could do a greater service to their own patients as well as halt rumors and keep the public informed, and could, perhaps, even help prevent accidents by helping the press give more accurate coverage.

It boiled down to getting the facts straight in

a way they could be understood by the average reader, and from the person best qualified—the attending physician.

The idea struck home. Many doctors told of experiences where patients had been reported with injuries that never existed—a bloody nose grew to a basal skull fracture by the time it hit print.

The Menominee County Medical Society did something about it. They joined with Worth in an effort for clarity and accuracy. A reporter now calls a doctor, tells the receptionist who is calling and about which patient. It takes the doctor but a minute to give a clear detailed report of injuries. The doctor has lost but a minute, and the story is straight.

An editor's crusade for accuracy helped medical

(Continued on Page 452)



Mr. Worth was presented with a special award at the MSMS 1955 Annual Session "for making a distinguished contribution to public understanding of Medicine and Health by the objective reporting and editorial interpretation of medical problems and progress." This is one in a series of sketches of persons honored by MSMS.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

DIPHTHERIA CASES INCREASE

As of March 1, thirty-five cases of diphtheria have been reported to the Michigan Department of Health. This compares with a total of fifty-nine cases for the entire year of 1955. So far, cases of diphtheria have turned up in St. Clair, Kalamazoo and St. Joseph Counties and in Detroit.

More trouble from diphtheria can be expected unless all children are immunized and given booster shots on schedule. In areas where diphtheria cases do develop, the department recommends Shick tests for teen-agers and adults and booster doses of toxoid if needed.

HOSPITAL LICENSING

The Michigan Department of Health has recently released a list of 237 Michigan hospitals that are now fully licensed to provide maternity care. This compares with only 143 hospitals on the fully approved list three years ago, and 185 two years ago.

Hospitals on the fully approved list have a total of 3,921 maternity beds available. Qualifications for a fully approved license for maternity care include ninety-three regulations which must be met in addition to forty-four provisions which must be included in plans for the immediate future.

CHRONIC DISEASE PROGRAM

The major chronic diseases considered in Michigan's public health programs and services are cardiovascular renal disease, tuberculosis, cancer, diabetes and syphilis. Heart disease and cancer together accounted for 54.4 per cent of the deaths in Michigan in 1954.

The Michigan Department of Health and the forty-three local health departments are currently carrying out activities based on a seven point chronic disease program. These activities fit into the following pattern:

1. *Casefinding*.—Chest x-ray and other screening activity; promotion of cervical carcinoma screening; clinic services in TB and VD; promotion of broader pre-employment examinations; promotion of cancer detection clinics and of expanded laboratory services.
2. *Care and Treatment*.—Referral for care; public health home nursing services.
3. *Follow-up*.—Follow-up of suspect cases discovered in screening projects; assist in maintaining medical supervision of all diagnosed cases.
4. *Research*.—Demonstration or pilot projects (case-finding); statistical studies of mortality and morbidity.
5. *Education and Training*.—Institutes and conferences for state and local health department personnel; externships.
6. *Records and Records Management*.—Expansion of the state tuberculosis central register to include cancer.
7. *Ancillary Services*.—Assisting in community organizations for casefinding; medical-social service, both consultation and direct service.

LETTERS TO EXPECTANT MOTHERS

The department has recently revised its series of letters on pre-natal care which are available to any expectant mother on request from her physician. The letters, eight in all, are sent out once each month and suggest answers to questions often asked by expectant mothers. They include such things as a discussion of the importance of a thorough physical examination by the doctor early in pregnancy, suggestions on nutrition, hints on proper wearing apparel and assembly of a layette, signs of labor, advantages of nursing the baby, and care of the mother and child after leaving the hospital. In addition to the eight letters addressed to the expectant mother there is an initial letter to the expectant father.

The letters are written in an informal, conversational style and emphasize the importance of proper medical care throughout pregnancy. Request cards for the series can be secured by physicians from their local health department or directly from the Michigan Department of Health.

JEAN PAUL WORTH

(Continued from Page 451)

men in his area over a pet peeve—false information about patients in the public press.

An ardent woodsman and hunter, Worth spends his free hours at his hunting camp on the Big Cedar River in Menominee County. His favorite pastimes are painting landscapes in oil, splitting wood, or hunting.

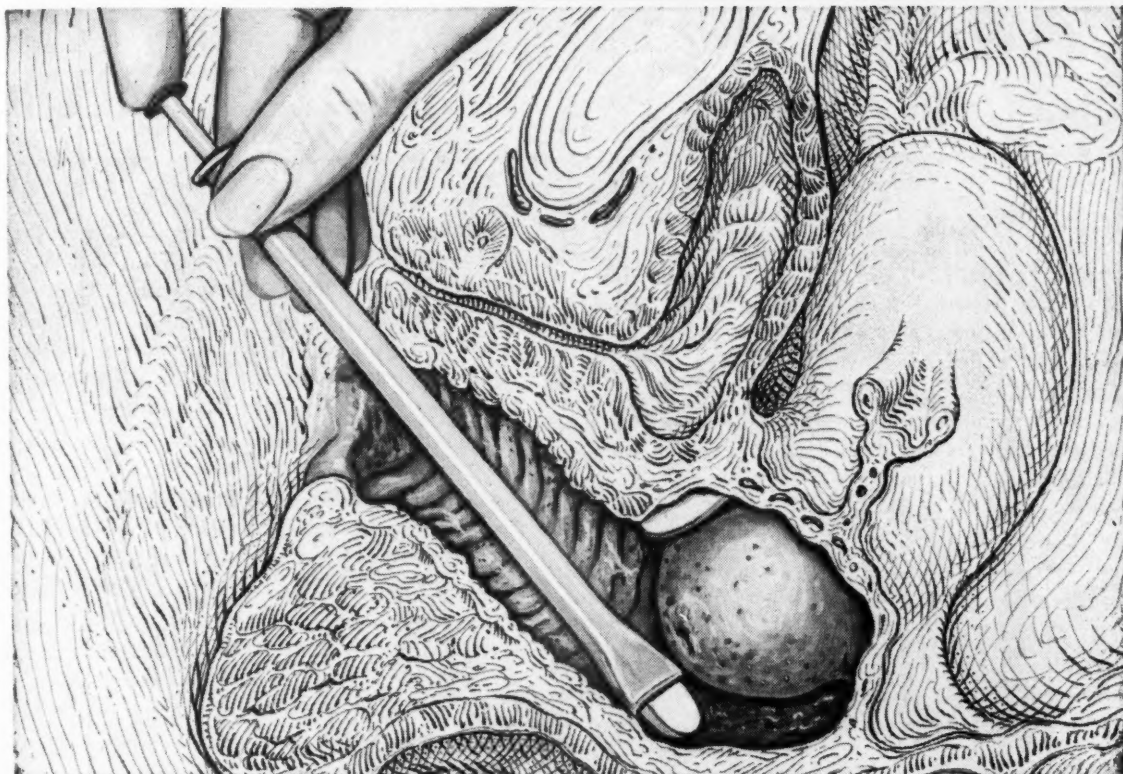
He also finds time for civic affairs. He has served on the Board of Education, City Park Board, Library Board, and has been active in lay educational activities as a member of the state advisory committee of the Community School Service Program.

A top flight newspaperman, he was promoted a year ago to Editor of the *Escanaba Daily Press* in Escanaba and thus also became affiliated with Russell papers in Marquette and Iron Mountain, the three largest daily papers in Michigan's Upper Peninsula.

Jean Worth is a friend of the medical profession because he knows that doctors are trying to render health service to people as a whole.

WILLIAM S. JONES, M.D.

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Warm acid douches (2 ounces of 5 per cent acetic acid or white vinegar to 2 quarts of

warm water) may be taken as often as desired for hygienic purposes.

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NEWS MEDICAL

MICHIGAN AUTHORS

William R. Eyler, M.D., and Howard P. Doub, M.D., Detroit, are the authors of an article entitled "Extra-intestinal Roentgen Manifestations of Intestinal Lipodystrophy," read before the Section on Radiology at the 104th Annual Meeting of the American Medical Association, Atlantic City, June 7, 1955, and published in the *Journal of the American Medical Association*, February 18, 1956.

Homer H. Stryker, M.D., Kalamazoo, is the author of an article entitled "Safe Traction in Children with Fractured Femurs," published in the *Journal of the American Medical Association*, February 4, 1956.

John R. Caldwell, M.D., and F. Wayne Hollinger, M.D., Detroit, are the authors of an article entitled "The Importance of Basal Blood Pressure," published in *Henry Ford Hospital Medical Bulletin*, December, 1955.

Harold F. Schuknecht, M.D., Detroit, is the author of an article entitled "Don't Shout!—I Can Hear!" published in the *Henry Ford Hospital Medical Bulletin*, December, 1955.

Charles Long, II, M.D., Detroit, is the author of an article entitled "Myofascial Pain Syndromes," published in *Henry Ford Hospital Medical Bulletin*, December, 1955.

Edgar A. Kahn, M.D., Ann Arbor, is the author of an article entitled "Congenital Anomalies of the Brain and Spinal Cord," published in the *Henry Ford Hospital Medical Bulletin*, December, 1955.

F. Janney Smith, M.D., Detroit, is the author of an article entitled "The Clinical Cardiovascular Features of Hyperthyroidism," published in the *Heart Bulletin*, November-December, 1955, and reprinted in the *Henry Ford Hospital Medical Bulletin*, December, 1955.

Edward McCall Priest, M.D., Donald G. Remp, Ph.D., Dan H. Basinski, Ph.D., and Laurie Dickson, M.D., Detroit, are the authors of an article entitled "Preliminary Experience with the Glutamic Oxaloacetic Transaminase Determination in Acute Myocardial Infarction in Humans," published in the *Henry Ford Hospital Medical Bulletin*, December, 1955.

John M. Sheldon, M.D., and Kenneth P. Mathews, M.D., Ann Arbor, are the authors of an article entitled "Urticaria: Present Concepts in Etiology and Management," presented by invitation at the 149th Annual Meeting of the Medical Society of the State of New York, Buffalo, Section on Allergy, May, 1955, and published in the *New York State Journal of Medicine*, February 15, 1956.

Lloyd F. Teter, M.D., Pekin, Illinois, formerly of Battle Creek, is the author of an article entitled "A Simple Adjunct in the Treatment of Inguinal Hernia," published originally in *THE JOURNAL* of the Michigan State Medical Society, a condensation of which is published in *Current Medical Digest*, December, 1955.

Merle Lawrence, Ph.D., and Phillip A. Yantis, Ph.D., Ann Arbor, are the authors of an article entitled "Thresholds of Overload in Normal and Pathological Ears," presented at the session on Hearing Measurements, 31st Annual Convention of the American Speech and Hearing Association, November 17-19, 1954, in Los Angeles, and published in *AMA Archives of Otolaryngology*, January, 1956.

Harry A. Towsley, M.D., Ann Arbor, is the author of an article entitled "The Constipated Infant," published in *THE JOURNAL* of the Michigan State Medical Society, and condensed in the *Current Medical Digest*, January, 1956.

W. H. Steffensen, M.D., Grand Rapids, is the author of an article entitled "The Technic of Administration of a Local Anesthetic for Repair of Cleft Lip in Infants," published in *The Journal of the International College of Surgeons*, a condensation of which appears in the *Digest of Ophthalmology and Otolaryngology*, December, 1955.

Phillip A. Yantis, Ph.D., Ann Arbor, is the author of an article entitled "Locus of the Lesion in Recruiting Ears," published in the *AMA Archives of Otolaryngology*, December, 1955.

Claire L. Straith, M.D., D.D.S., F.A.C.S., F.I.C.S., D.A.B., Detroit, is the author of an article entitled "Principles of Plastic Surgery in Industry," read at the Twentieth Annual Congress of the United States and Canadian Sections, International College of Surgeons, Philadelphia, September, 1955, and published in *The Journal of the International College of Surgeons*, January, 1956.

Mathew Alpern, Ph.D., Ann Arbor, is the author of an article entitled "Testing Distance Effect on Phoria Measurement at Various Accommodation Levels," published in the *AMA Archives of Ophthalmology*, December, 1955.

John T. Ferguson, M.D., and William H. Funderburk, Ph.D., Traverse City, are the authors of an article entitled "Improving Senile Behavior with Reserpine and Ritalin," published in *The Journal of the American Medical Association*, January 28, 1956.

J. W. Rae, Jr., M.D., and L. F. Bender, M.D., Ann Arbor, are authors of an original article "Treatment of

(Continued on Page 456)

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NEWS MEDICAL

(Continued from Page 454)

Patients with Rheumatoid Arthritis by Physical Means" which appeared in JAMA February 25, 1956.

W. R. Eyler, M.D., and H. P. Doub, M.D., Detroit, are authors of an original article "Extraintestinal Roentgen Men of the Stations of Intestinal Lipodystrophy" which appeared in JAMA February 18, 1956.

Manuel Rodriguez-Gomez, M.D., Antonio Valdes-Rodriguez, M.D., and A. L. Drew, M.D., of Ann Arbor, are authors of an original article "Effect of Zoxazolamine (Flexin) in Treatment of Spasticity" which appeared in JAMA of March 3, 1956.

* * *

News comment from Carey P. McCord, M.D., Editor, *Industrial Medicine and Surgery*:

"John E. Summers, M.D., Grand Rapids, in the Journal of the Michigan State Medical Society for January, 1956, has a detailed and well-written account of the McIntyre-Saranac Conference on Occupational Chest Diseases held February 6-8, 1955, at Saranac Lake, New York.

"Only rarely is a national conference on occupational diseases or any other facet of occupational health favored with lengthy reporting in state medical journals or any medical publications besides those in the field of industrial medicine. Dr. Summers' report is the exception and the reporting is exceptional. The pronouncements at Saranac Lake based upon elaborate laboratory and clinical investigations hold significant newness for all industrial physicians. Appearance in the Journal of

the Michigan State Medical Society of this full scale and accurate article provides heartening recognition that in our present-day American culture, every physician is an industrial physician."

* * *

George L. Waldbott, M.D., Detroit, has been invited as the guest of honor for the Third Congress of Allergists and Asthma at Dresden, Germany, in June, 1956.

* * *

The American Society for Surgery of the Hand held its eleventh annual meeting in Chicago, January 27, 1956, with more than 900 surgeons registered.

Scientific papers were presented by Drs. Robert E. Carroll, L. Ramsay Straub, Edward H. Wilson, Ernest W. Lampe, Herbert Conway, John Bouve, J. William Littler, William Metcalf and William Whalen, New York; Julian M. Bruner, Des Moines; Henry C. Marble, Boston; Bland W. Cannon, Memphis; Carruth J. Wagner, San Francisco; Robert H. Clifford, Detroit; Richard S. Oakey Jr., Philadelphia, and Darrel T. Shaw, Cleveland.

* * *

Selective Service Director Lewis B. Hershey has issued a warning to the nation's hospitals against appointment of draft-vulnerable physicians to residency posts. Here is the situation: Some 4,500 young doctors subject to military call are due to complete internships in July. Estimating that 500 will be physically unqualified and 500 will receive Defense Department deferment for resi-

(Continued on Page 458)

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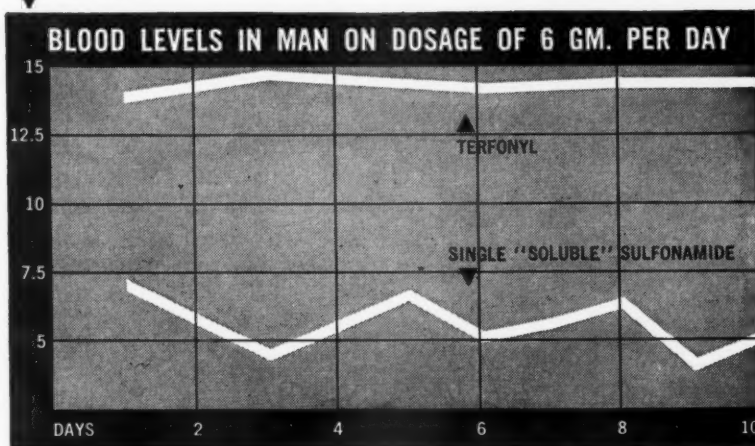
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— After Lehr, D., Modern Med. 23:111 (Jan. 15) 1955.

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In experimental infections (*Klebsiella*, *Pneumococcus*, *Streptococcus*), Meth-Dia-Mer sulfonamides have been shown to be from three to four times more effective on a weight basis than single "soluble" sulfonamides.

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0.167 Gm. each of sulfamethazine, sulfadiazine and sulfamerazine per tablet or per 5 ml. teaspoonful of suspension.

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(Continued from Page 456)

dency training, that leaves 3,500 potentially available for draft callup. But armed forces will need 4,600 replacements in fiscal year beginning July 1 (exclusive of USPHS needs). That leaves a deficit of 1,100 to be plucked from remnants of Priorities I and II and the large pool of Priority III's (non-veterans).

General Hershey is, in effect, putting teaching hospitals on notice that they run risk of losing first, second or third-year residents up to age 46 if these men are subject to induction. "Neither the hospitals nor the individual physicians involved would be justified in protesting a call to military service," he declared.

As of December 31, 1955, there were only 176 doctors in Priorities I and II combined who were classified in 1-A and physically fit for military service. Note: Defense Dept. soon may send a requisition to Selective Service for its first physician inductees of 1956, for activation in second half of this year.

* * *

The Jackson County Cancer Society and the Jackson County Medical Society will conduct a symposium on common practices in Diagnosis and treatment at Hotel Haues, 2 p.m., April 26, 1956. The session will consist of a panel discussion moderated by F. A. Collier, M.D., Chairman of the Department of Surgery, University of Michigan Medical School. The panelists will be:

1. A. C. Curtis, M.D., Professor of Dermatology and Syphilology, University of Michigan
2. Isadore Lampe, M.D., Professor of Radiology, University of Michigan
3. James H. Maxwell, M.D., Professor of Otolaryngology, University of Michigan
4. Howard H. Cummings, M.D., Professor Emeritus, Post Graduate Medical College, University of Michigan
5. Reed M. Nesbit, M.D., Professor of Surgery, University of Michigan.

At 4 p.m., there will be a coffee break followed by a question-and-answer period.

The evening session will begin with cocktails at 6 p.m., followed by a banquet at 7 p.m.

The main speaker for the evening will be Alton Ochsner, M.D., Professor of Surgery and Chairman of the Department of Surgery, Tulane University, whose subject will be "Cancer of the Stomach."

The fee for the afternoon and evening session will be \$10.00 including cocktails and dinner.

* * *

Eleventh Annual Schering Award—Devoted to research and the communication of knowledge in the medical profession, the Schering Award has begun its eleventh annual program for medical students in the United States and Canada.

Students are invited to participate by selecting one of three suggested subjects and submitting papers to the Schering Award Committee, Bloomfield, N. J. Both a \$500 first prize and \$250 second prize are offered for

(Continued on Page 460)



KARO® SYRUP . . . meets the need for an easily digested milk modifier

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use of Karo for milk modification are—the ease with which formulas may be calculated or prepared—its ready availability—and its economy. Light or dark Karo syrup may be used interchangeably with cow's milk or evaporated milk and water. Each fluid ounce (2 tablespoonfuls) yields 120 calories of solid nutrition.



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1. Pollock, B. E., and Pruitt, F. W.: *Am. J. M. Sc.*, 226:172, 1953.

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(Continued from Page 458)

each of the three subjects. Decisions are made by a group of judges who are authorities in their respective fields. In addition, every participant in the contest receives a professionally useful gift.

The three subjects for 1956, announced by C. J. Szmaj, M.D., chairman of the Schering Award Committee, are:

1. "The Clinical Use of Adrenocortical Steroids in Collagen Diseases"
2. "Metabolic Aspects of the Aging Process"
3. "New Applications of Antihistamines in Medicine and Surgery"

Literature and entry forms are being distributed in the medical schools. Students who are interested in participating, either individually or in teams, should submit their entry forms before July 1, 1956, and manuscripts must be postmarked not later than Sept. 30, 1956.

* * *

Professor Roberto Caldeyro-Barcia, who holds the Chair in Obstetric Physiology at the University of Montevideo, Uruguay, will visit Wayne University College of Medicine, under the auspices of the Department of Obstetrics and Gynecology, and Detroit Receiving Hospital, on the gynecology service, from Monday, April 30, through Friday, May 4. Doctor Caldeyro will present a series of five lectures on *Physiology, Physiopathology, and Pharmacology of Uterine Contractility and Their Applications to Obstetric Practice.* These lectures will be given at 4 p.m. on each of the five days of his visit, Monday through Friday, in the auditorium of the Mullett Street building of Wayne University College of Medicine. Doctor Caldeyro is the world authority on the recording and measurement of uterine contractility in humans and has utilized the accurate method of implanting a tiny balloon through a large needle in the actual uterine wall. The balloon is connected to a small polyethylene catheter and the system is filled with sterile saline solution for recording purposes on a drum. The titles of the lectures are as follows:

1. "Methods of Studying Uterine Contractility and Normal Contractile Waves."
2. "Studies of Abnormal Contractile Waves and Uterine Hypertonicity."
3. "Uterine Contractility in Normal and Abnormal Labor; the Effect of Contractions on Uterine Blood Flow."
4. "Pharmacological Basis for the Management and Induction of Labor."
5. "Uterine Contractility in the Third and Fourth Stages of Labor."

All physicians, residents, interns, and workers and students in the basic sciences are welcome to attend this very important series of lectures which embody one of the most basic contributions to the field of mammalian reproduction in recent years.

Leon DeVel, M.D., MSMS Rheumatic Fever Coordinator, addressed the Rotary Club of Cadillac on February 21. His subject was "The Michigan Rheumatic Fever Control Program."

* * *

Cancer Registry.—A properly functioning registry of cancer patients is a requirement for approval of a hospital's cancer program by the American College of Surgeons, under new regulations which were made effective after the first of the year. The requirements recognized three types of cancer programs:

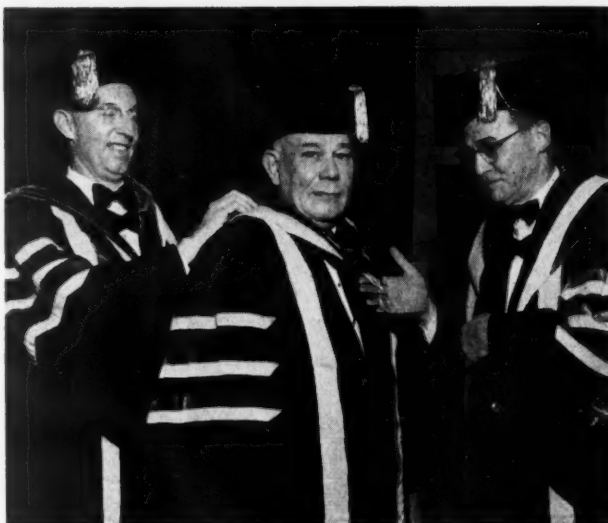
1. The specialized cancer hospital providing complete service for cancer patients.
2. The general hospital conducting organized cancer clinical activities, including cancer registry, cancer consultation and treatment service.
3. The general hospital, usually small in size, which maintains only a registry of all cancer patients.

All three types of program must be under the supervision of a cancer committee of the hospital's medical staff consisting of physicians directly concerned with the diagnosis and treatment of cancer and appointed by regularly established medical staff authorities.

A total of 625 hospitals is now included in the list of those approved by the College.

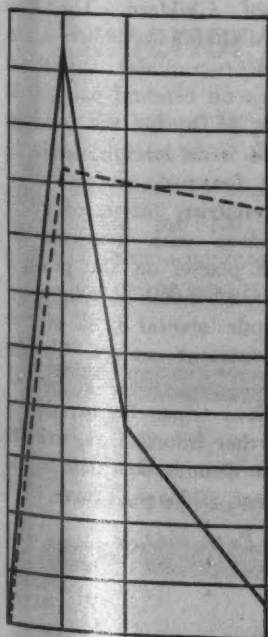
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Harry M. Nelson, M.D., Detroit, has appointed Leon E. Briggs, Treasurer of Ford Motor Company, as General Chairman of the 1956 Cancer Crusade of the American Cancer Society's Southeastern Michigan Division. The cancer drive will be conducted in April.



Two colleagues extended congratulations to Dr. Samuel W. Donaldson (center) Ann Arbor, Michigan, following his receipt of the coveted Gold Medal of the American College of Radiology, at the annual meeting of the College held recently in Chicago. Dr. Wilbur Bailey (left) Los Angeles, California, incoming President of the College, assisted Dr. Warren W. Furey, (right) Chicago, Illinois, in placing of the Medal. Dr. Donaldson is director of the department of radiology at St. Joseph's Hospital, Ann Arbor, and was awarded the Gold Medal for his outstanding contributions to the art and science of radiology.

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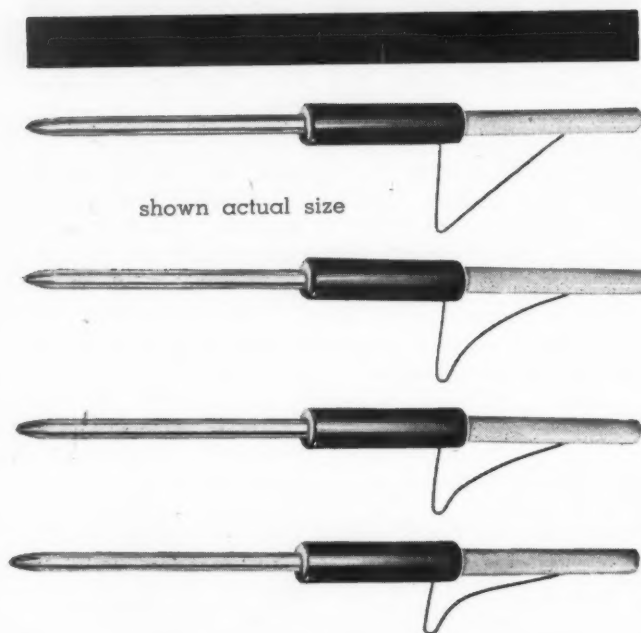
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**Described in his paper which will be sent on request*

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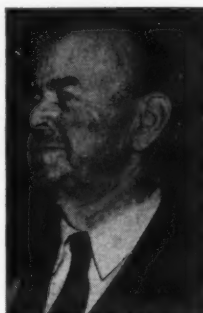
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28148

Jackson, Michigan

The American College of Chest Physicians will hold its 22nd Annual Meeting at Hotel Sherman, Chicago, June 6-10, 1956. For program and information, write the College at 112 East Chestnut Street, Chicago 11, Illinois.

* * *



Walter H. Winchester, M.D., of Flint, Michigan's Foremost Family Physician for 1955, was signally honored by the Genesee County Medical Society on the anniversary of his 81st birthday, January 23, 1956.

Eulogies on the important life work and accomplishments of Doctor Winchester were offered by L. Fernald Foster, M.D., of Bay City, who spoke of him as a physician;

Grover C. Penberthy, M.D., Detroit, who outlined Doctor Winchester's experience as a soldier; Richard L. Rapport, M.D., of Flint, who spoke of Doctor Winchester as a medical pioneer; Reverend Franklin D. Elmer, Jr., who recounted the civic activities of Doctor Winchester; and Dean A. C. Furstenberg, M.D., of Ann Arbor, who outlined accomplishments and improvements in service to patients occurring during the fifty-three years during which Dr. Winchester practiced in Flint.

L. O. Shantz, M.D., President of Genesee County Medical Society, presided at the meeting which was attended by more than 500 of Dr. Winchester's friends.

* * *

The Michigan Regional Committee on Trauma of the American College of Surgeons was presented with the blue ribbon symbolic of the most activity of any state trauma committee, at the recent 34th Annual Meeting of ACS Committee on Trauma, held in Cincinnati.

Congratulations to the Michigan Trauma Committee and particularly to its immediate past-chairman, Vernon C. Abbott, M.D., of Pontiac, who presented the annual report of his committee in a finely documented book.

* * *

Neuromuscular Diseases of Children.—The Cook County Graduate School of Medicine announces a two-week intensive course in Neuromuscular Diseases of Children with special emphasis on cerebral palsy, to be given by Meyer A. Perlstein, M.D., for the two-week period of June 18 to 29. This is an intensive, didactic, and clinical course designed for pediatricians, orthopedists, neurologists, and physiatrists interested in the care and treatment of children with neuromuscular handicaps. Emphasis will be placed on the practical clinical aspects of treatment and rehabilitation procedures. The course will include several field trips to demonstration clinics, and treatment centers. The fee for the course, which is \$225, includes the cost of luncheons as well as the various trips. Registration in the course is limited. For further information, write to John W. Neal, Registrar, Cook County Graduate School of Medicine, 707 S. Wood Street, Chicago, Illinois.

(Continued on Page 464)



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NEWS MEDICAL

(Continued from Page 462)



Milton A. Darling, M.D., is Chairman of Arrangements for the 91st Annual Session of the Michigan State Medical Society, to be held at the Sheraton-Cadillac Hotel in Detroit on September 26-27-28, 1956.

Dr. Darling is President of the Wayne County Medical Society, a longtime Delegate from Wayne County to the MSMS House of Delegates and active in scientific

and socio-economic affairs of Michigan medicine.

Congratulations, Dr. Darling!

* * *

C. Allen Payne, M.D., Grand Rapids, was guest speaker at the Sixth Annual County Society Officers Conference of the Kentucky State Medical Association, in Lexington, March 29.

* * *

Mrs. Guy L. (Josephine H.) Kiefer, founder of the Woman's Auxiliary to the Michigan State Medical Society in 1926, died February 26, 1956, in Port Huron, after a long illness.

Mrs. Kiefer was the first President of the Woman's Auxiliary, also organizer and first President of the Michigan State Club of Lansing, where she lived from 1927 until 1955 when she moved to Port Huron.

Surviving Mrs. Kiefer are two daughters, Mrs. Duval Laurie of Port Huron and Mrs. Homer C. Bayliss of Detroit; and two grandchildren, Guy K. Laurie, M.D., of Petoskey, and Mrs. Martin Owens, Jr., Port Huron.

* * *

The American Cancer Society and the National Cancer Institute of the U. S. Public Health Service are jointly sponsoring the Third National Cancer Conference in Detroit June 4-5-6. For information and program, write Harry M. Nelson, M.D., 1067 Fisher Building, Detroit, Chairman of Michigan Committee on Arrangements.

* * *

Margaret H. Zolen, M.D., of Kalamazoo, was named "Woman of the Year" by the American Businesswomen's Association at its recent convention in St. Louis.

A panel of judges made the selection on the basis of community accomplishments, outside activities, unusual hobbies and interests and choice of career.

Congratulations, Dr. Zolen!

* * *

Earl E. Weston, M.D., Detroit, assumed the presidency of the Michigan Industrial Medical Association at the close of its annual meeting in Lansing on March 1, succeeding Paul J. Ochsner, M.D., who retired after serving the Society as its chief officer during the past year.

Millard Shellman, M.D., of Grand Rapids, was chosen as President-Elect; Theodore Roth, M.D., of Detroit, Vice President, and Duane Block, M.D., Detroit, Secretary-Treasurer.

(Continued on Page 466)

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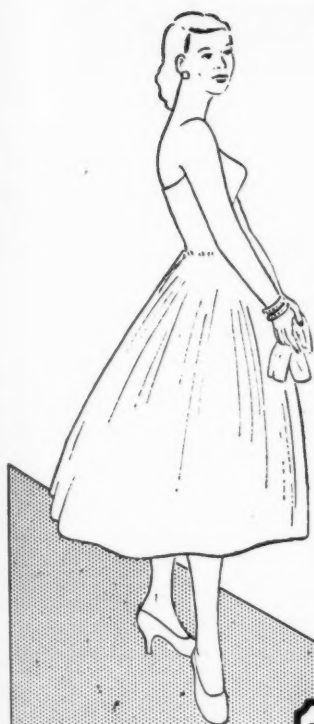
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NEWS MEDICAL

(Continued from Page 464)

MSMS members J. P. Bertucci, M.D., of Ishpeming, Walter E. Mercer, M.D., of East Lansing, and O. D. Stryker, M.D., of Mt. Clemens, were reappointed by Governor G. Mennen Williams as members of the Michigan State Board of Registration of Medicine.

Congratulations!

* * *

A summer camp for diabetic children will be opened for the eighth season under the auspices of the Chicago Diabetes Association, Inc., from July 15 to August 5, 1956, at Holiday Home, Lake Geneva, Wisconsin.

In addition to the complete camp personnel, the Chicago Diabetes Association furnishes a staff of resident physicians and dietitians, trained in the care of diabetic children.

Boys and girls, aged eight through fourteen years, are eligible. For further information regarding fees, interested persons should be directed to write or telephone the office of the Chicago Diabetes Association. Fees will be set on a sliding scale to meet individual circumstances.

Physicians are urged to notify parents of diabetic children and to enter the names of children who would like to attend camp. Applications may be obtained from, and inquiries should be addressed to The Chicago Diabetes Association, 5 South Wabash Avenue, Chicago 3, Illinois. Telephone Andover 3-1861.

Limited capacity requires prompt application.

John G. Bielawski, M.D., Medical Director of the Michigan Heart Association, recently was elected President of the Staff Conference of Heart Associations at the New Orleans meeting of the Conference. This organization consists of approximately 400 members throughout the country and has as its main objective the interchange of experiences and development of mutual understanding among the Board members and staff of the American Heart Association and the staff of affiliates and charter heart associations.

Congratulations, Dr. Bielawski!

* * *

The American Goiter Association will hold its annual meeting at the Drake Hotel, Chicago, May 3-4-5, 1956. Included in the program are the following Michigan physicians: W. H. Beierwaltes, M.D., D. R. Korst, M.D., N. S. Hiramoto, M.D., all of Ann Arbor, and B. E. Brush, M.D., M. A. Block, M.D., and J. M. Miller, M.D., of Detroit.

* * *

The Permanence of a Tax!—The tower of St. Eloi in Nevers, France, was built by levying in the year 1358 a tax on all food consumed in the town. The tower was completed 597 years ago and now is a crumbling ruin—yet the tax is still being collected!!!

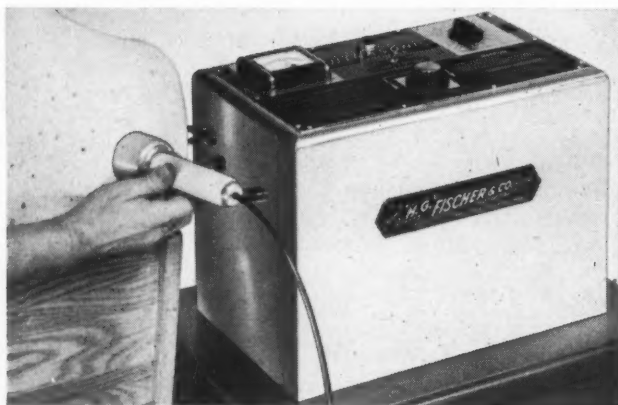
* * *

Michigan's two medical schools received more than \$80,000 in grants during 1955 from the National Fund

(Continued on Page 468)

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NEWS MEDICAL

(Continued from Page 466)

for Medical Education. Altogether NFME awarded grants amounting to \$2,657,433 to the nation's eighty-one medical schools last year.

In 1955, the University of Michigan Medical School received \$53,018 from NFME, and Wayne University College of Medicine received \$27,359. Since 1951, the University of Michigan has received a total of \$169,385 from the National Fund, and Wayne, \$108,879. Nationwide, NFME's grants for 1955 were 22 per cent greater than in the preceding year and the largest in the history of the organization.

Since 1951, when the first grants were awarded, the nation's medical schools have benefited by a total \$9,589,490.

Of the 1955 grant, 58 per cent was contributed by corporations through the NFME Committee of American Industry, and the balance by physicians through the American Medical Education Foundation. Fund grants are unrestricted except for the provision that they cannot be used for building purposes. The money is used by the schools primarily to hold their teachers, fill faculty vacancies, and open new courses in areas of recent scientific progress.

In announcing its 1955 totals, NFME emphasized that the situation is still critical, even with the \$90,000,000 endowment gift to privately supported medical schools announced recently by the Ford Foundation. NFME points out that the needs of the nation's eighty-one medical schools for additional annual income have been variously estimated as from 10 to 40 million dollars.

(Continued on Page 470)

MEDICAL TELEVISION SHOWS

Produced by Michigan Health Council

Date—1956	Station	Subject	Guests
February 2	WKAR-TV, East Lansing	Rural Health	Marjorie Karker, Lansing
February 5	WJBK-TV, Detroit	Cholesterol and Heart Disease	James M. Ryan, M.D., Detroit
February 9	WKAR-TV, East Lansing	Children's Dental Health Week	Robert L. Overholt, D.D.S., Lansing
February 12	WJBK-TV, Detroit	Heart Surgery	James D. Fryogle, M.D., Detroit
February 16	WKAR-TV, East Lansing	Local Health Departments	J. K. Altland, M.D., Lansing
February 19	WJBK-TV, Detroit	Tuesday's Child	
February 23	WKAR-TV, East Lansing	No Program Scheduled	
February 26	WJBK-TV, Detroit	Tuberculosis Film	A Film

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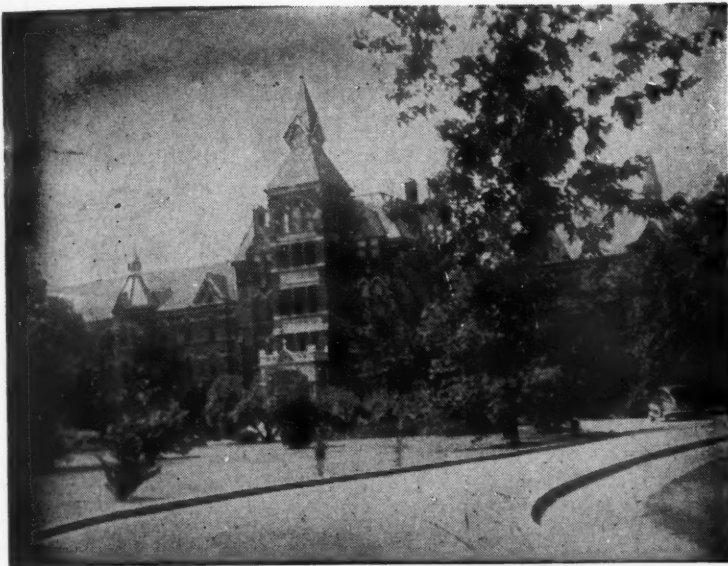
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(Continued from Page 468)

DOCTOR LOCATIONS

Through February 29, 1956

Placed by Michigan Health Council	Opened Practice in	Approximate Date
Osvaldas Nakas, M.D.	Buchanan	February 15
Martin F. Bruton, M.D.	Detroit (Chrysler)	April 1

Assisted by Michigan Health Council

Kenneth W. Yost, M.D.	Marysville	January 31
Seymour B. Ekelman, M.D.	Mt. Pleasant	January

* * *

Scholarships to the Midwest Institute on Alcohol Studies to be held at Madison, Wisconsin, June 18-22, 1956, have been made available by the Michigan State Board of Alcoholism. The Institute, cosponsored by the University of Wisconsin and Western Michigan College in co-operation with the Michigan State Board of Alcoholism and the Wisconsin Committee on Alcoholism, is designed to equip professional people with a better knowledge of alcoholism, alcohol education, and problems related to alcohol. The scholarships provide room, board, tuition, and registration.

Deadline date for final application is April 30. Those wishing additional information are requested to write to George Nimmo, Educational Director, Michigan State Board of Alcoholism, Post Office Box 686, Lansing, Michigan.

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Krantz, J. C., Jr., and Carr, C. J.: The Pharmacologic Principles of Medical Practice, ed. 3, Baltimore, The Williams and Wilkins Company, 1954, p. 998.

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